

*This book is dedicated to the memory of William Phelps Eno and, as he would have it, to those in the transportation community who seek a more promising transportation future — one that is safer, healthier and more responsive to society's needs and its environment.*

# Eno Foundation for Transportation

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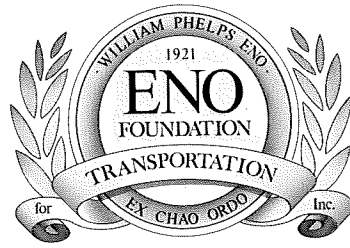
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• ENO •

*The Man and The Foundation*  
*A Chronicle of Transportation*

by

John A. Montgomery

# Acknowledgements

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“The true history of the United States is the history of transportation.”

This quotation is from *The Hundred Years* by Philip Guedalla, who declared that “the names of railroad presidents are more significant than those of the Presidents of the United States.”

Their works, however, do not eclipse the twentieth century achievements of the intrepid men and women who have unified America in a pervasive web of paved highways and urban streets.

*Eno — The Man and The Foundation: A Chronicle of Transportation* traces some of their accomplishments and is based largely on the personal journal of William Phelps Eno, world pioneer in traffic control. Starting in 1900 and continuing until he died in 1945 at the age of 87, he kept an extensive diary regarding developments in traffic and its facilities. It is contained in 30 thick, jumbo-size, leatherbound scrapbooks. *Eno — The Man and the Foundation* serves as a key to researchers who wish to delve further into Mr. Eno’s rich treasure of transportation facts. This book also summarizes the accomplishments of Mr. Eno and the Foundation he created and financed.

All present officers, Directors, and staff members of the Eno Foundation for Transportation cooperated in the preparation of this publication by providing information, citing records, contributing illustrative material, and working on editing and makeup. Special thanks of the author also go to Mrs. Mary Reed, retired executive secretary to three Foundation presidents, for her historical records; Mrs. Harriet Eno Goetz (Mrs. John H.) Holly, for biographical information about her father, Col. Robert C.F. Goetz, who succeeded W.P. Eno as head of the Foundation; and Mrs. Lois W. Calvert, Assistant Director of the Simsbury (Connecticut) Historical Society, who supplied information about the Eno family members’ impact on their ancestral hometown.

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# Preface

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Every once in a while a circumstance occurs where one man's life is profoundly influenced. Rarer still, is the ability of one man's work to influence many others over time. The circumstances that influenced young William Phelps Eno's life in 1867 sparked his desire to make a positive contribution to the future course of transportation events. His contributions are used around the world by everyone who operates an automobile, depends on the prompt and efficient delivery of goods, or walks in the urban setting.

This book is about William Phelps Eno and the organization he created to deal with the centuries-old problem of traffic chaos. In a broad sense it also is a chronology of modern transportation development. It reflects the enthusiasm and imagination of one person who devoted most of his life's effort and personal resources to bettering transportation for everyone. While many are acquainted with the Eno Foundation, few know its history or the extent to which it affects their daily lives. That is why this book was developed.

As a beneficiary of successful family investments in New York City, William Eno was able to leave the business world in 1899 at the age of 41 to devote the rest of his long life to the improvement of street traffic control systems and other transportation concerns through scientific research and education. Much of his lifetime was devoted to developing and promoting logical and workable solutions for managing street traffic flow. To William Phelps Eno, honored at home and abroad as the "Father of Traffic Regulation," much credit goes for such now-taken-for-granted innovations as the first codified traffic regulations and rules for driving, traffic guidance with pavement markings and signs, driver hand signals and the promotion of driver licensing and vehicle safety inspection, speed limits and proper traffic law enforcement.

As the author of the world's first widely accepted traffic ordinance, his impact was worldwide. His "Rules of the Road" brought order to chaotic traffic conditions, helped the French to hold the Germans at Verdun in the First World War, and saved countless lives on the world's streets and highways. Eno's advice was eagerly sought by local and national governments, but this recognition came slowly during the first years of his crusade for change. In recalling the early period of his pursuit of traffic reform, Mr. Eno stated "...the greatest difficulties that I have met with in my unofficial capacity were to make those in authority realize the importance of what was new to them." As many contemporary innovators can attest, time has not softened this obstacle.

After many years of crusading around the world for traffic reform and the adoption of innovative ideas in transportation planning, design and operation, William Phelps Eno founded and funded the Eno Foundation in 1921. From its inception, the mandate of the Eno Foundation was broad, enabling it to be responsive to changing needs. There were no restrictions as to modes of transportation — all were the province of the Foundation's scrutiny. The Eno Foundation now, as then, is dedicated to objectivity in all its efforts to promote better transportation. It has no political or Eno family affiliation. Its financial independence affords it the ability to examine transportation issues and problems without a self-serving profit objective. Over its history, the Foundation has committed its time and monetary resources to taking the long view in search for transportation problem solutions and expanding the base of knowledge. This is exceptional in a world where most organizations must focus on solving immediate problems, leaving little incentive to encourage thinking that may not shorten the path to their own objectives.

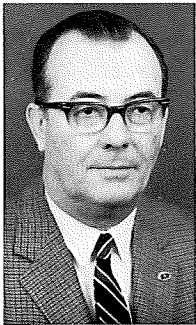
As the Eno Foundation moves forward into the twenty-first century it will continue to cultivate the enthusiasm for innovative thinking and the application of scientific approaches to problem solving used by its founder in the twentieth century. It will strive to position itself along the cutting edge of transportation knowledge, always seeking ways to shed more light on challenges confronting today's transportation leaders. Mr. Eno envisioned the Foundation's role "...to help set the stage and provide the tools of knowledge necessary for those who must meet change with change."

The ongoing purpose of the Foundation is to educate and to promote the use of relevant knowledge, all within the broad framework of today's highly integrated and interdependent transportation complex.

Wilbur S. Smith  
Chairman of the Board  
On Behalf of the Board of Directors  
Eno Foundation for Transportation, Inc.

# About the Author

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Prior to retirement in 1973, John A. Montgomery was for 11 years editor of the afternoon *Columbia Record*. Before that he was with *The State*, the sister morning newspaper in the South Carolina state capital. He was consecutively reporter (1929), sports editor (1935), city editor (1938), and managing editor (1941-1961). While he was on the staff, *The State's* circulation increased from under 30,000 to become South Carolina's largest newspaper and the first to exceed 100,000. (It has since passed 150,000.)

Mr. Montgomery's journalism career covered all phases of activity ranging from high school football to the World Series, from county court to National Democratic and Republican conventions, and across the country from Florida's bowl games to agriculture in California's San Joaquin Valley. He also handled writing assignments in 25 foreign countries and territories in addition to Alaska, Hawaii and Puerto Rico.

After retiring from the *State-Record* newspapers he wrote *Columbia, South Carolina: History of a City*, a 200-page illustrated volume published in 1979 by Windsor Publications of California under sponsorship of the Greater Columbia Chamber of Commerce. He also wrote the 247-page *History of Wilbur Smith and Associates, 1952-1984*.

Mr. Montgomery has served as president and chairman of the South Carolina Press Association, the South Carolina Managing Editors Association, Presbyterian College Board of Visitors, Presbyterian College Alumni Chapter, Columbia Lions Club, Family Service Center, USO, Men of Shandon Presbyterian Church, and on numerous boards of directors. He is a member of the American Society of Newspaper Editors, the South Carolina Agency of Vocational Rehabilitation, was a director of Family Service Association of America for 9 years, and has been listed several times in *Who's Who in America*. His club memberships include Cotillion, Forum, Lions, Palmetto and Sigma Nu.

A native of Greeleyville, South Carolina, he was graduated from Presbyterian College, Clinton, South Carolina, with a B.A. in English and was principal and coach at St. Stephen High School, South Carolina 1 year before joining the staff of *The State*. He married Lottie Carter of Columbia. They have three children and six grandchildren.





# CHAPTER 1

## Foundation Is Unique

The Eno Foundation for Transportation is unique. It is the world's only independent, self-supporting institution devoted entirely to improving the efficient conveyance of people and goods. Its scope covers traffic and related transport functions on land, water, air, and reaches beyond into transport concerns for space travel.

The Eno Foundation is a twentieth century creation, but its seed was planted in 1867 in the mind of a nine-year-old boy, Billy Eno, when he and his mother, riding in the family carriage, were trapped in a New York City traffic snarl. The police were no help because traffic control was not their business, they were not trained for it, and there were no laws regulating traffic.

This agonizing experience always stuck in the forefront of Billy's memory, and fueled his determination to do something for traffic control and discipline. During his early adult years in a real estate and land development vocation, William Phelps Eno often considered ways of bringing order out of chaos on the ever-crowding avenues.

Congestion at the turn of the century inspired a variety of panaceas, and some fantastic proposals were suggested by otherwise practical men. High land cost was an urban fact, as was the traffic and safety problem. Piling layers of elevated streets upon each other had the appearance of plausibility, as did tunneled subways, streets prohibiting certain kinds of vehicle traffic, and many other solutions—practical and far-fetched. Automobiles and a variety of self-propelled vehicles for the street were only on the verge of rapid acceptance, yet the problems associated with urban traffic congestion were severe in nearly every city.

### **A Letter to the Editor**

In 1899, Billy, by then a very wealthy 41-year-old man known formally as William Phelps Eno, released some of his pent-up aspirations for what he called "Rules of the Road" in a letter to the editor of a small horsemanship publication. His suggestions and designs caught the fancy of the large dailies, which promoted his ideas and rallied public support.

Mr. Eno then gave up his real estate and architectural career and devoted the last 46 years of his life to the cause of sane, orderly and lawful transportation. His "Rules of the Road" were adopted by New York City and then by Parisians who referred to them as "Le Systeme Eno." It was by using Le Systeme Eno that France's taxicab army rushed to Verdun in World War I and halted the German blitzkrieg, stemming the drive toward Paris.

## Friends and Foes Adopt Eno

Between world wars, Eno "Rules of the Road" were adopted by most capitals around the world. Italy's Benito Mussolini used the procedures to silence the nerve-shattering horn-blowing in Rome. Hitler's Germany, employing its domestic police forces as the framework for forbidden military training, treated Mr. Eno like royalty on his Berlin visits, and borrowed his ideas to build a military highway network, the autobahn, which served as a pattern for the U.S. Interstate highway system advocated by Mr. Eno during the Franklin D. Roosevelt administration.

Le Systeme Eno was used officially by the Allies in World War II and also governed traffic of Germany, Italy and Japan. It was adopted universally wherever there was regulated motor travel.

## An Institution for Creative Thinking

Mr. Eno recognized early that proper education and training for those using roads, as well as for those charged with enforcing the rules, were critically important elements in attempting to improve traffic conditions. What surprised Mr. Eno most during his traffic career was the difficulty in persuading public officials to consider new ideas and implement changes based on scientific research rather than on political patronage.

As Mr. Eno's ideas and suggestions were gradually implemented, their success produced an ever-widening circle of interest and appreciation for improving traffic circulation using scientific methods and education. At the age of 63, after devoting 22 years of his life to the study of traffic control, Eno could see that the search to improve street traffic circulation would continue to pose many more challenges than one person could address in a lifetime. Thus, he established the Eno Foundation to provide an organizational arrangement capable of attracting the participation and thinking of others and to provide an objective medium for assessing and disseminating this thinking.

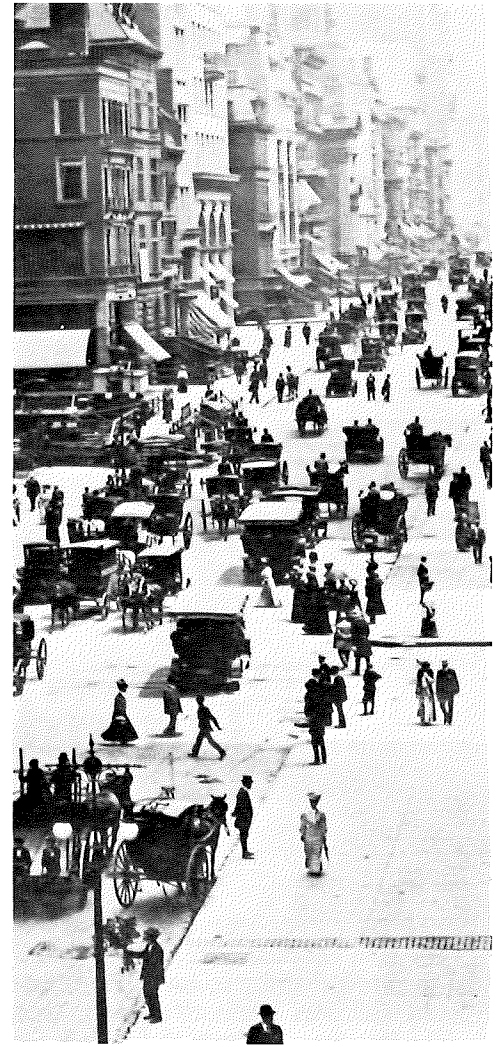
Mr. Eno continued his efforts for traffic improvements after his health failed, and when he died in 1945 he assured perpetuation of his endeavors and pursuit of his goals by leaving much of his fortune to the Eno Foundation.

The Eno Foundation's products and services are distributed free or for a token reimbursement to leaders in government, business, industry, engineering and education on every continent.

When the not-for-profit organization was chartered by the state of Connecticut in 1921, rural America traveled on narrow, rutty roads. Trucks, popularized by military uses in World War I, were short-haul vehicles. Automobile road speeds of 30 miles per hour were considered fast. Streets of major cities were becoming choked with automobile traffic, and growing congestion and increased accidents were adversely affecting commerce. Regulation of traffic was a hodgepodge of local political experimentation. Traffic engineering was in its infancy.

The Eno Foundation's scope of interests has evolved with changes in transportation issues and concerns. The corporation was first named the "Eno Foundation for Highway Traffic Regulation," but its policies were geared to expanding horizons. The founder, William Phelps Eno, was motivated by the need for national standardization of traffic rules and signs to avoid confusion in traveling from one jurisdiction to another.

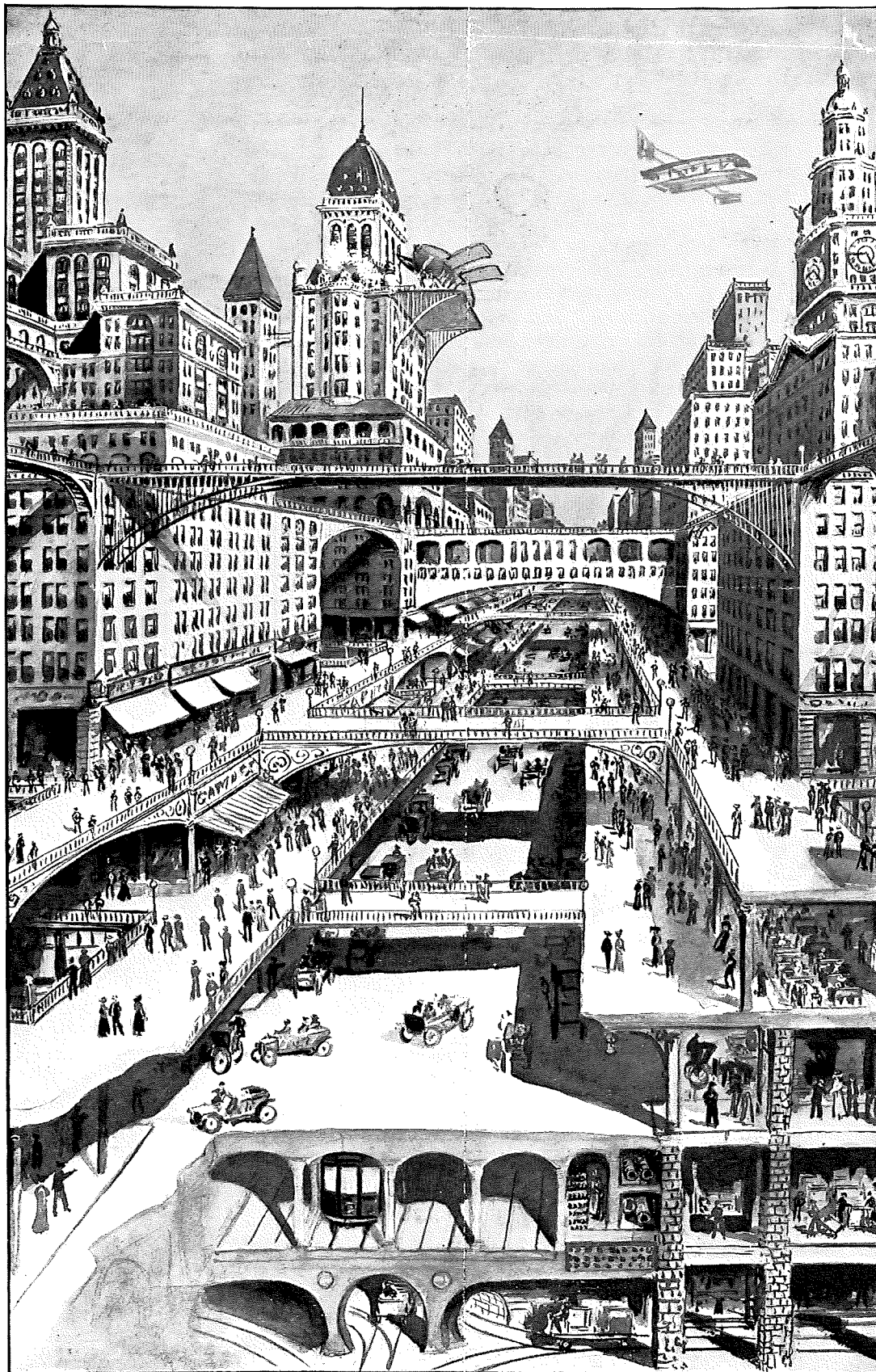
By 1938, the year the Eno Foundation built its elegant permanent home overlooking the Connecticut shore of Long Island Sound, standardization of highway and street laws was generally accepted.



*At the dawn of the 20th century, the horse ruled the streets and roads of the nation. Few people envisioned the rapid replacement of horses with automobiles.*  
(Source: American Automobile Association)

Use of double-deck streets were watched with interest in New York and Pittsburgh. Their acceptance encouraged multilevel street proposals in several major cities. This proposed five-level street for New York City was designed to reduce pedestrian conflict and speed business traffic. Some superstreets were actually constructed, more often they were not. More important than the superstreets themselves, this remarkable fantasy was matched by equally remarkable advances in the science of planning and developing transportation projects—advances that formed the birth of scientific transportation planning advocated by William Eno and others of the day.

(Source: Cassur's Monthly)



Roads were vastly improved, traffic was heavier, cars were faster, and safety became the dominant factor in traffic planning. Other transport modes and land-use development were beginning to interact heavily with street and highway traffic. The Foundation adapted its programs to meet the new challenges and changed its name to "Eno Foundation for Highway Traffic Control."

But Eno services outgrew the appellation. Parking in downtown areas moved to the fore of concern, both for the Foundation and local governments. The boom in urban traffic was strangling commerce in the inner cities, and solutions would involve recognizing the interaction among transportation modes and facilities. There was ever-increasing demand for expanded and improved transport facilities.

Following the Eno policy of progressive adjustment, the organization changed its name again in 1968 to reflect its broadening field of interest and expertise; it is now known as "Eno Foundation for Transportation." Promoting improvements in all aspects for all modes of transportation is its business. Its goals are accomplished through disseminating information, largely through its publishing efforts, and supporting and encouraging research, education and cooperation in transportation fields.

### **Foundation's Administration and Programs**

Headquarters for the operation are in an elaborately furnished university-type building in the Saugatuck section of Westport, Connecticut. The Foundation's activities are conducted with a small staff under the direction of a 7-member Board of Directors (see Appendix A) with the advice and participation of a rotating 21-person Board of Consultants (see Appendix B) who are expert in their respective areas of transportation.

Seven members of the Board of Consultants are elected each year for a term limited to 3 years, assuring a steady flow of new people and fresh ideas. Consultants maintain year-round contact with the central organization. Third-year seniors are called in for special advisory assistance, especially to set up long-range plans and objectives.

Research and public information provide the main thrust of the Foundation, which publishes a periodical, *Transportation Quarterly*, an independent journal that is said to be to transportation what the *Wall Street Journal* is to finance. (See Appendix C for a complete listing of Eno publications.) The Quarterly customarily contains approximately ten articles in about 160 pages. Articles are contributed by individuals working in government, industry and academia, reflecting a wide range of transport concerns. The Quarterly maintains a worldwide circulation of approximately 5,000, and is distributed without charge to recipients.

The Foundation also supports transportation education with financial grants, textbooks and sponsored seminars. A major Eno event is the annual Joint Conference of the Boards of Directors and Consultants. Each of the meetings deals with a focused theme of major transportation interest, then the views and opinions of conference participants are published in the Quarterly.

In conclusion of a long feature article in *The Saturday Evening Post* in 1956 on why "the Eno Foundation is exceptional in the world of traffic," Rufus Jarman wrote: "It is the only agency with the time and money to take the long view. It is the main fount of pure research, and it has become so important in the field that people consider it the great oracle of traffic as far away as India, where they still drive elephants." Years of expansion and growth have not altered the veracity of that appraisal.



*Built in 1938, this Westport, Connecticut building still serves as the headquarters of the Eno Foundation some 50 years later. Designed with an elegant Georgian Colonial style and excellent proportions, and constructed with uncompromising quality of materials and craftsmanship, the building's function and beauty have endured. This lasting usefulness reflects the confidence of its builder, William Phelps Eno, in the continuing need for addressing concerns of safe and efficient transportation.*

*The Foundation's headquarters is located some 60 miles outside of New York City's center, and is appropriately bounded by some of the world's most traveled land, water and air corridors. The surrounding metropolitan clamor, however, is in stark contrast to the tranquil, campus-like setting of the building, offering an atmosphere conducive to research and creative thinking.*





## CHAPTER 2

# William Phelps Eno, Traffic Control Pioneer

Few men in history have had a greater impact on the daily lives and habits of the people of the civilized world than William Phelps Eno, “the Father of Traffic Regulation”

Any American who has driven an automobile on the right-hand side of the road, signaled for a turn or a stop, ridden on a one-way street system, stood on a pedestrian safety island, shared the right-of-way in alternate crossings of a busy intersection, obeyed a stop-and-go signal, carried a driver’s license, displayed a license plate marker on a vehicle, used the convenience of a taxicab stand, enjoyed the security of painted lines on pavements, or experienced confidence in traffic police protection and guidance—anyone who has done any of these things or taken advantage of many, many other rules of the road that are commonplace today is indebted to Mr. Eno for pioneering their adoption.

### **Wrote First Municipal Traffic Ordinance**

Eno authored and pushed through to adoption the world’s first written municipal traffic ordinance. It applied first only to his native New York City, but was subsequently officially approved by the city of Paris and employed as a model for other great foreign capitals, as well as for the larger cities of the United States, finally coming into universal usage. His writings on transportation subjects were translated into various foreign languages, including French, German and Japanese.

Mr. Eno received his first stimulus to discipline the streets and highways when, at the age of nine, he was in a New York traffic jam that haunted him the rest of his life.

In the Spring of 1867 he and his mother, riding in an elegant barouche, turned into Broadway from East Twenty-third Street where their brownstone mansion stood, halfway down the block from Fifth Avenue. They headed downtown in their carriage drawn by a chestnut span. They were on their way to visit young Billy’s father at his real estate office on Lower Broadway.

The story is picked up by Humphrey Douless who wrote in 1935 in *The Sunday Post* newspaper published in Bridgeport, Connecticut, one of Mr. Eno’s neighboring Connecticut cities:

*“Broadway,” for such it was called in “The Age of Innocence,” was choked with traffic. Coaches, surreys, drays and lorries rumbling over the cobblestones made little headway, and with horsecars adding to the confusion, traffic came to a dead halt at Grand Street. For a half hour the snort and whinny of horses held by close reins,*

*the angry jingle of horsecar bells, and the futile bellows of helmeted policemen, made a scene the wide-eyed youth, standing on the carriage seat beside his mother, would remember, firing his mind with immediate ideas on the situation so that he was able to make several helpful suggestions to the coachman.*

*In such a manner came the inspiration for what three score and ten years later is called the science of highway traffic regulation, a movement of international scope, at the head of which stands the figure, acclaimed the world over for his lifelong devotion to a humanitarian service, William Phelps Eno.*

“That very first traffic jam (many years before the motorcar came into use) will always remain in my memory,” Mr. Eno was quoted years later. “There were only about a dozen horses and carriages involved, and all that was needed was a little order to keep the traffic moving. Yet nobody knew exactly what to do; neither the drivers nor the police knew anything about the control of traffic.”

He continued, “This was my first experience with what disorder could do. We all sat there for half an hour until one driver decided to turn around and head the other way. Then gradually the mess began to unsnarl.”

### Three Dates on Foundation’s Headquarters

When Mr. Eno dedicated a spacious Georgian-style mansion in 1938 for the Eno Foundation that extended, expanded and perpetuated his career of service to transportation, the seal over the door bore three dates:

- 1867 — the year of his childhood’s first awareness of the need for traffic regulation;
- 1899 — the year he gave up his real estate business to devote full time to traffic reform;
- And 1921 — the year he established what is known today as the Eno Foundation for Transportation, Inc.

Two years after his Broadway trauma, when he was eleven, young Billy Eno’s growing obsession with traffic improvement was further enhanced by a visit with his parents to London, where he was impressed by the smoother and safer flow of traffic—superior to New York’s not because London had laws to govern it (it didn’t) but because of finer horsemanship and the common sense and courtesy that went along with it.

Recalling the event in the early 1900s he said:

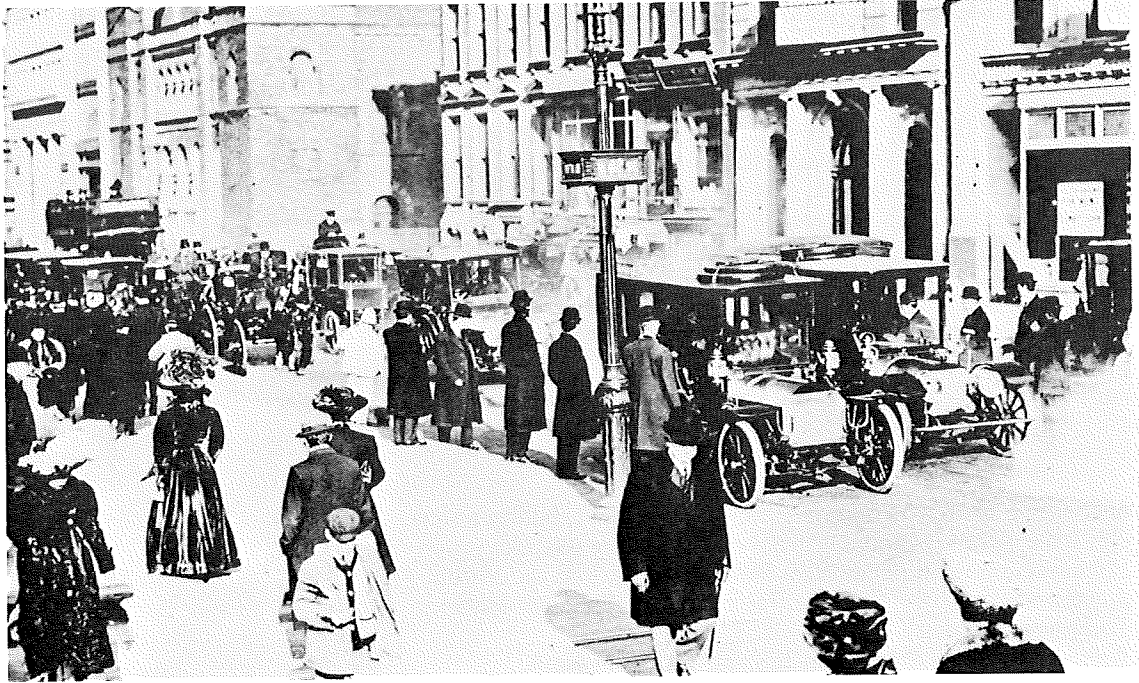
*In the spring of 1869 we visited England and the first thing I noticed was the efficient control of traffic, which even at that time existed. The police were well trained and the drivers knew their duties. They had no printed regulations, but as most English people were accustomed to the use of horses, they knew the essentials which only lately have been put in printed form.*

Mr. Eno also had a lifelong interest in horses, which gave him contacts that were exceedingly valuable in pushing through his programs for traffic reform. Among the finest horses and horsemen of the day were those of the mounted police of New York, who developed a spirit of camaraderie with Mr. Eno. And *The Rider and Driver*, the weekly New York publication for equestrian sportsmen, became his chief comrade in arms in his efforts to introduce traffic laws in the city of New York.



*Three dates in the seal over the entrance to the Eno Foundation building were important to William Eno. The year 1867 marked his first awareness of the need for traffic regulation; 1899 was the year he gave up his real estate business to devote full time to traffic reform; and 1921 was when he established what is known today as the Eno Foundation for Transportation.*





*New York City's Fifth Avenue and 42nd Street was called the "busiest corner in the world!"*  
(Source: Moss Photo Service, New York)

### **Saw Both the Problem and Solution**

*The New York Times* said that late nineteenth century street traffic in New York was so bad that "a merchant who sent his wagon to the docks for a load of hay could not tell within hours when it would return through the plunging horse-drawn traffic."

Contrasting the state of traffic before the Eno era with the modern flow in Manhattan, Oliver Patton wrote in *Transport Topics* in 1975: "In the last part of the nineteenth century it was said that to get down Broadway required more skill than to cross the Atlantic in a clam boat. These times, if your nerves are good and your suspension sturdy, you can go for ten blocks on Broadway at a time, and it's probably easier, and certainly more fun, than rowing to Lisbon?"

Patton concluded, "Whom do we thank for this blessing, this aggravation? Chances are traffic control would have been invented without him, but the first man to see both the problem and the solution was William Phelps Eno."

### **Genealogy of the Eno Family**

Mr. Eno was a descendant of two pioneer New England families, the son of Amos Richards and Lucy Jane Phelps Eno. The three-letter spelling of the surname was not adopted until the family came to America. Other spellings included Henno, Hainault, Henne, and Hennot.

William Phelps Eno's ancestors are authenticated at least back to February 7, 1468, when the name of Collard Henno was entered into the registry of Mons, a ninth century town in southwest Belgium and, incidentally, the scene of the first engagement fought by the British Expeditionary Force in World War I (August 23, 1914).

An immediate ancestor of the American family was Collard's great-grandson, Jacques Henno, a lieutenant in the guard formed by Huguenot citizens of Valenciennes, in Northern France, to resist the Spaniards. After the town, now famous for its lace, was captured, Jacques fled to England toward the end of the sixteenth century. He was accompanied by his son, Jean, who afterward married Catherine Jon. Their son, Jacques (or James) Henno the Third, emigrated to

America in 1648 and settled in Windsor, Connecticut.

Jacques Eno, the American immigrant, married Anna Bridwell; their son James married Abigail Bissell; their son David married Mary Gillet; their son Jonathan married Mary Hart; their son Salmon married Mary Richards; their son Amos Richards married Lucy Jane Phelps; one of their sons was William Phelps Eno, who was twice married but had no children.

Lucy Phelps Eno was a descendant of William Phelps, a pioneer settler of Windsor, Connecticut, who came from Tewkesbury, England, in 1630, landing in Dorchester, Massachusetts.<sup>1</sup>

### **William Was Last of Nine Eno Children**

Amos and Lucy Eno had nine children, the youngest being William Phelps Eno. The oldest was Amos F. Eno, who became a large real estate holder like his father. The eldest son was born in 1836 and died in 1915. Following him in order were:

- Mary Jane Eno, who married James W. Pinchot, had two sons, Gifford Pinchot, a famous conservationist who was Governor of Pennsylvania, and Amos R.E. Pinchot. Their lone daughter, Antoinette, married Sir Alan Johnstone of Hackness Hall, Yorkshire, England.
- Ann Marie Eno, who died in 1883 at the age of 44.
- Henry Clay Eno, 1840-1904, New York surgeon.
- Antionette, 1842-1930, who married Charles Broughton Wood.
- Salmon Elisha Eno, who died in infancy in 1847.
- John Chester Eno, 1848-1914, who started his New York business career after graduation from Yale University in 1869.
- Lucy Phelps Eno, who died in 1851 shortly before her third birthday.
- And William Phelps Eno.

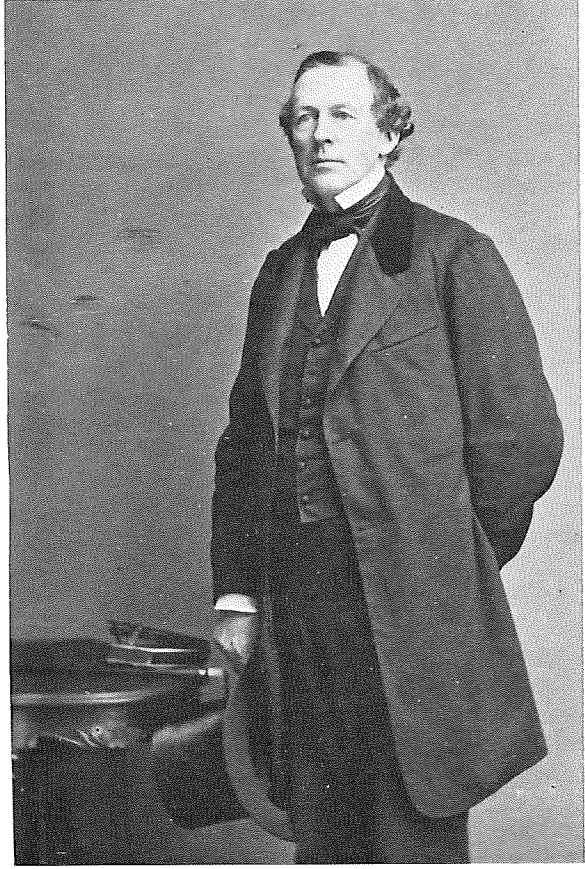
### **Grew Up at Broadway and Fifth Avenue**

William was born June 3, 1858, in New York City, where his parents had resided for more than 20 years. He lived his first 9 years at his birthplace, 26 East Twenty-third Street, growing up amidst the hustle and congestion of the rapidly growing metropolis.

In December 1867 he sailed with his parents for Europe. They stayed in Paris at the Grand Hotel, considered then the world's finest. The family suite faced the Opera House, which probably accounted somewhat for Mr. Eno's strong interest in the theater in later years. Young William attended classes in Rue de Courcelle. He transferred later to a school at suburban St. Germain where he learned to ride a velocipede, a wooden-wheeled precursor of the bicycle. He and his family returned to New York in October 1869 after visiting England and Italy as well as France. They also visited Britain and France the following year for a few months.

Before applying for admission to Yale University in the class of 1881, young Eno had attended ten day-schools and five boarding schools. Besides France and New York City, their locations were in Newburgh, New York; New Haven, Connecticut; and East Hampton, Massachusetts. He profited from the personal information, friendships and knowledge of human nature he acquired from such a variety

<sup>1</sup>When William P. Eno acknowledged the honorary membership bestowed on him in 1944 by the Eugene Field Society (National Association of Authors and Journalists, St. Louis, Missouri) he made this notation: "My uncle, General John S. Phelps, was Governor of Missouri some years ago and was in Congress after that—I am told longer than any other individual. His father was for many years a member of Congress from Simsbury, Connecticut, and his father, Major General Noah Phelps, reconnoitered Fort Ticonderoga and guided Ethan Allen in" (Ethan Allen, one of the first heroes of the American Revolution, led his band of Green Mountain Boys against Ticonderoga. They attacked at dawn and the astounded British commander, awakened from sleep, surrendered.)



*Amos (right) and Lucy Eno had nine children of which William P. Eno was the youngest. William, pictured here at age 5, lived his first 9 years at his birthplace, 26 East Twenty-Third Street in New York City.*  
(Source: Simsbury, Connecticut Historical Society)

of educational opportunities, but the numerous transfers complicated the conditions of university matriculation despite the fact that he passed his examinations. "I had so many conditions that I did not think I could make them up before Christmas, as was required," Mr. Eno said later, "so I withdrew my papers in honorable standing and waited for the next class."

During his undergraduate years at Yale, Mr. Eno was only an average student, feeling that many of his courses were useless in his pursuit of a career in architecture. His high standing in mathematics and certain other subjects he considered beneficial lifted his general grade. In his junior year his popularity with fellow students was evident when he was put in charge of the Junior Promenade and the Junior Cotillion. But his college career was disrupted by a 10-week siege of scarlet fever.

He passed his examinations, but on advice of his doctor and orders of his parents, he did not return for his senior year and did not graduate with his class. His classmates unanimously, except for two who could not be located, signed a petition asking the Yale Corporation to give him a degree with his class.

Mr. Eno wrote in his book, *The Story of Highway Traffic Control, 1899-1939*:

*The Corporation, being composed of kindly gentlemen, regretted that they could not give me a degree with my class as only the faculty could do that. All they could do would be to recommend the faculty to do it and to inform the faculty, at the same time, that if they did not grant the request, the corporation would give me a Master of Arts degree. However, my good friends, the faculty, wanted to please the corporation and so gave me the degree of*

*Bachelor of Arts with my class.*

A generation passed before Yale did give Mr. Eno a Master of Arts. The degree was in architecture but also was awarded “for your keen discernment of the grave problems involved in the complexities of municipal traffic and for your outstanding scientific contributions to their solution.”

In the commencement oration June 20, 1923, Professor William Lyon Phelps referred to Mr. Eno as:

*... the originator and master of the organization of modern street traffic, by which science he saved much time and many lives. The regulation of street traffic in the large cities of America and of Europe is his mobile monument. His books, the only treatises on the subject, have been translated into various languages, and his advice has been sought by the authorities of London, Paris and Brussels. He has saved many pedestrians and drivers, and the only obstacle to the absolute success of his work is the ever present one of human stupidity.*

*The necessity for the system Mr. Eno has inaugurated is universal. The marvel of it never ceases to impress the thinking man who watches, in some modern center of close congestion, the narrow margins by which the law that two bodies cannot occupy the same space at the same time escapes having exceptions. The establishment, in so short a time, of a system by which safety replaces danger, and order forestalls chaos, is a tremendous tribute to the power of the human brain.*

Shortly after ending his undergraduate years at Yale, William Phelps Eno joined his father's New York real estate firm, and on April 4, 1883 at the age of 25, he was married to Alice, daughter of Henry Alenson Rathbone, in her hometown, New Orleans, Louisiana.

W.P. Eno acquired substantial wealth on his own, but it was largely as the result of a multi-million dollar bequest from his father, Amos, that he was able to abandon his real estate career and devote full time and a personal fortune to promoting traffic regulation all over the world.

### **Eno's Multimillionaire Father**

William Eno's father, Amos, the second son and third child of Salmon and Mary (Polly) Eno, was born in 1810 in Simsbury, a town in Hartford County, Connecticut, incorporated in 1670. Amos received a local common school education that gave him elementary preparation for a successful business pursuit. While still in his teens he received practical experience in a Hartford dry goods house.

In his early 20s he went to New York where, in 1833, he and John Jay Phelps organized the firm of Eno and Phelps. It blossomed into one of the top wholesale dry goods companies in the city. Amos Eno invested his profits in New York real estate, much of which he bought for as little as \$15 an acre. After the dry goods business was dissolved in 1850, he devoted full time to his real estate interests.

His properties had zoomed in value, including land in what became known as Times Square, the popular heart of the city. In fact, Amos Eno was an owner of the Flatiron Building, the familiar landmark of the central site. He owned property in the neighborhood of Columbia University and was one of the first developers of certain downtown areas in the vicinity of City Hall. And in 1859, a year after his last child, William, was born, he built the famous Fifth Avenue Hotel at Twenty-third Street, Fifth Avenue, and Broadway, an



*During his undergraduate years at Yale, William Eno (right) was only an average student. His father, Amos, made his fortune first in the dry goods business and later in real estate. Amos Eno's peers described him as "a man of fine instincts and generous impulses."*

(Source: Simsbury, Connecticut Historical Society)

uptown section that was considered the ultimate place to be in mid-nineteenth century America. He was also one of the founders of New York City's Second National Bank.

Amos Eno's peers described him as "a man of fine instincts and generous impulses." Among his many benefactions were a library and a town farm "to support the indigent poor," which he gave to his native Simsbury, Connecticut, where he spent his youthful years. In a letter to trustees of the library in 1890, acknowledging a debt of appreciation for what Simsbury had meant to him, this man reputed to have a \$20 million fortune, shared his philosophy:

*When one comes into the world he is in the midst of surroundings which operate more or less forming his character. If he is surrounded by luxury and ostentation these will be likely to weaken and enervate him. If he is subjected to deprivation and trials, these will form in him a character which will enable him to weather the storm of life and to make his way in the world. The boy that goes barefooted in his youth seldom goes barefooted in his old age . . .*

*The influences that surrounded my youth were owing to the excellent character of the people of the town. They were God-fearing, sober, scrupulously honest, frugal, economical and industrious. I am indebted for these to the place of my birth, but the greatest boon that Simsbury has bestowed on me was one of her daughters who, for more than 40 years, was my inspiration and joy.*

His son, William Phelps Eno, even as a child, traveled extensively accompanied by his parents. After his formal education he was associated with his father's real estate and architecture business in New York until the elder Eno died at the age of 87 on February 21, 1898.

## Gives Up Business for Traffic Career

William P. Eno gave up his business career in 1899 to devote full time the rest of his life to the improvement of traffic conditions. He also had many avocational interests that included expert horsemanship, yachting, art collecting, civic service, boxing, billiards, and attending opera performances. His theater and equestrian inclinations combined into a strong contributing factor in his successful effort for traffic reform. Many of his basic "Rules of the Road" were commonsense maxims of good horsemanship, and one of his first triumphs of transportation regulation resulted from a theater experience.

One of Mr. Eno's most irritating exasperations was getting clogged up in the jumble of carriages going to or from the theater.

Final curtains every show night in Manhattan's playhouse district were followed by traffic gluts in the vicinity. *The Bridgeport Post* gave this description of the disorganized dispersal: "Broughams, fancy calabashes, baronial clarences and elegant barouches lined up in front of the Casino, the Knickerbocker, the Empire and the Metropolitan, all on the same block of Broadway, to take theatergoers to Sherry, to Rector's or Delminico's for 'a hot bird and a cold bottle' had a time getting under way."

Mr. Eno and his wife, Alice, had to wait 45 minutes one rainy night at the turn of the century before their carriage could reach them through the opera-house jam. Soon afterward the vehicular mass caused them to miss the opening of a Metropolitan Opera performance. That did it! Mr. Eno sent an article to *The Rider and Driver* to protest the situation and suggest solutions. He also wrote the Metropolitan management, suggesting the installation of a box with illuminated numbers indicating which carriage in line would drive up next. The device was adopted with police cooperation and was probably the first electric traffic signal in history. It reduced confusion, bringing Mr. Eno newspaper praise for eliminating "the midnight tumult and shouting."

From this time on the name of Eno was associated with traffic remedies. (This may be a suitable time to point out that the family had no connection with the once-popular Eno's Fruit Salts, a pharmaceutical remedy for other disorders.)

Although William P. Eno had homes in New York and Washington, D.C., he spent his last 58 summers at Saugatuck, a quiet seaside village in Westport, Connecticut. In 1887 he bought an old house there on the shore of Long Island Sound and enlarged it into a 30-room "cottage," as he called it, named "Judah Rock." He had a staff of servants for the house and a landscape team to maintain its surrounding beautiful formal gardens.

"He lived there like a feudal lord, in dignity and elegance," Jarman wrote. "His steam yacht plied between his private dock and Bar Harbor and Martha's Vineyard all summer, and his stables held a score of fine horses. Eno was always attended by a coachman and a footman when he went out to drive. He never drove an automobile."

## Traffic Pioneer Never Fought Traffic

The last sentence has been the punch line for many stories about the champion of traffic control and regulation. Indeed, the greatest man in the regulation of traffic never learned to drive an automobile. He always employed a chauffeur.

Mr. Eno's first love was horses and he never lost that enthusiasm. He had barns and riding trails on his estate, and when he went to Washington for the winters, he had his horses shipped there





*This 30-room "cottage" in Saugatuck (now Westport), Connecticut was the summer home of William Eno. Judah Rock, as it was locally known, provided deep water mooring for larger pleasure boats and plenty of space for raising horses — two of Mr. Eno's interests.*

for his use.

He also had a crew for his 152-foot yacht (half the length of a United States football playing field). It was built in 1901 by George Lawley and Son and was called *Aquilo*, which means north wind or the north compass point.

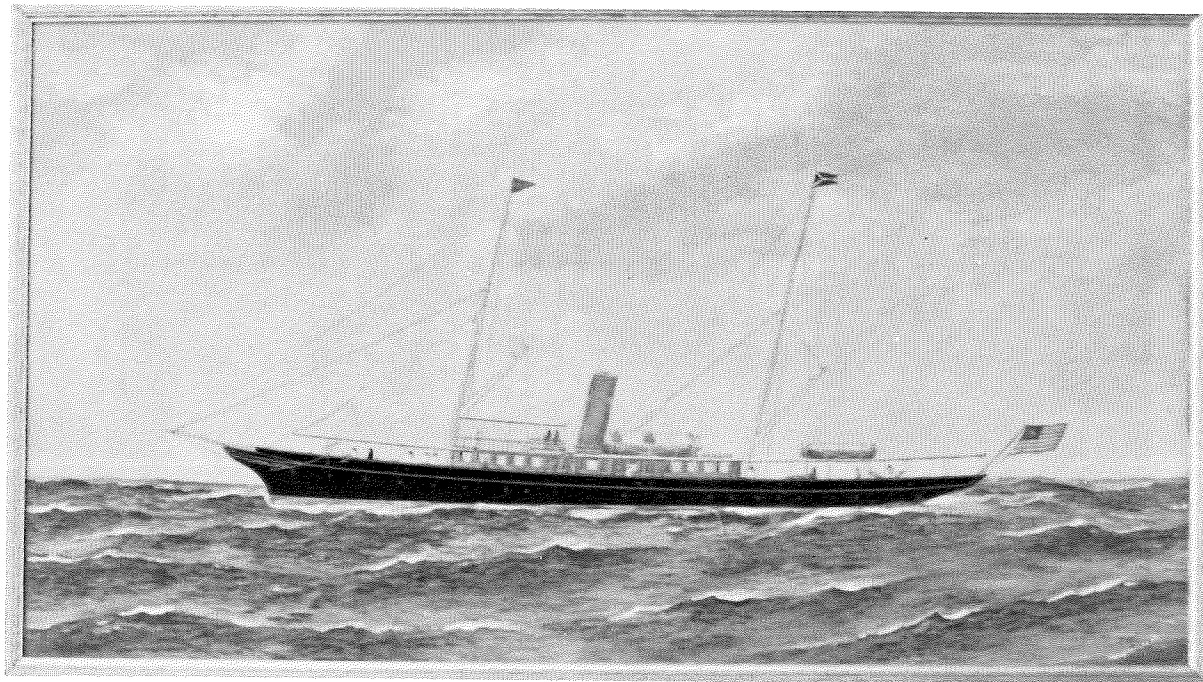
### **Made Nine Voyages to Europe**

Mr. Eno traveled abroad often, always seeking to enlarge his knowledge of transportation and to share his information and advice. He made nine voyages to Europe on traffic control missions, conveying ideas from one side of the Atlantic to the other.

When touring the United States he usually engaged a private railroad coach.

Although traffic and related matters claimed his primary attention and generosity, he continued to invest wisely. His peers said he amassed an additional multi-million dollar fortune in securities, especially oil stocks, after his retirement from the business world.

When he died he left a major part of his estate in trust to perpetuate the Foundation which was his pride and joy the last 24 years of his life.



*Steam yacht "Aquila" was built for Mr. Eno in 1901 by George Lawley & Son. It had an overall length of nearly 153 feet, a 20-foot beam and a draft of slightly more than 9 feet.*



## CHAPTER 3

# ‘Rules of the Road’ Face Uphill City Fight

“Every day adds to the necessity of rational management of our street traffic, the knowledge and observance of the rules of the road and their enforcement by the police, who, at the present time, do not understand them themselves or have not been instructed to properly enforce them.”

With this paragraph William Phelps Eno, in December 1899 and at the age of 41, turned an avocational obsession into a full-time dedication to traffic control. It was the introduction of an article, “Reform in Our Street Traffic Most Urgently Needed,” which appeared in the January 20, 1900, issue of *The Rider and Driver*. The New York horsemanship weekly described the author as a “gentleman of vast property interests in New York.” The article elicited an excited response from public, press and police. It eventually resulted in the world’s first written traffic ordinance and formal regulations for the smooth and safe flow of street and highway traffic.

Nearly half a century later *The Rider and Driver* recalled the event that introduced Eno traffic proposals to a skeptical world.

“Forty-five years ago,” said the New York weekly publication in March 1944, “a gentleman of distinguished but modest bearing appeared at the office of *The Rider and Driver* in the Cumberland, since replaced by the Flatiron Building, at Broadway and Fifth Avenue, Twenty-second and Twenty-third streets, and said he had written an article on much needed reform of street traffic, his name being William Phelps Eno.”

“The first important principle of the rules of the road is that vehicles shall keep to the right,” the Eno article said. The pronouncement may seem now to have been of small consequence, but it must be remembered that in 1900 automobiles were a novelty; carriage and wagon drivers were accustomed to driving as they wished—left, right or center.

### Rules for Passing, Turning, Stopping

Mr. Eno’s article also gave rules for safety for passing, turning, stopping.

“It is a question whether an ordinance should be passed prohibiting vehicles stopping under any circumstances at the left-hand curb . . . In slowing up or stopping, a signal should always be given to those behind by raising the whip or hand and twirling it in the direction in which the turn is to be made.” The hand-signal practice was a forerunner of the electrically operated turn signals on vehicles of today.

Probably anticipating objections to his proposition, Mr. Eno wrote:

*The observance of these rules does not mean a hardship to anyone, but, on the contrary, makes it easier for everyone concerned, easier and safer and more expeditious for the driver, the rider, the bicyclist and the*

pedestrian. It is safe to say that nine-tenths of the accidents in our streets come from non-observance of the rules of the road and senseless driving.

Note Mr. Eno's use of the phrase, "rules of the road," because it was to become his trademark. Up to this time there were no rules of the road except commonsense assumptions or customs of usage.

"The time has come when it is most important that a change should be made without delay," the Eno thesis continued.

### Emphasizes Education, Enforcement

Mr. Eno offered two primary remedies: "First of all, it is necessary that our police should understand the rules of the road, and, second, that they enforce them."

He suggested further that "the driver of every public and numbered (licensed) vehicle be required to hold a numbered card issued by the police certifying that he applied for it and showing that he thoroughly understood how to drive safely." When this proposal was written, driver examinations generally were still in the far distant but inevitable future.

As early as 1893, however, licenses were issued in Paris, France, to automobile drivers at least 21 years old who demonstrated a knowledge of driving and the mechanics of steam engines, for in those days it was anticipated that motorcars would be powered by steam.

### Steam, Power of the Future

Steamcars were technically locomotives, and thus were subject in the late nineteenth century to the New York rule that a man holding a red flag must proceed one hundred feet ahead of each as it moved. The regulation failed because of enforcement difficulty, but authorities continued to insist that the driver must have an engineer's license—a requirement necessitating years of apprenticeship as a steam boiler fireman. A small city up the Hudson River granted licenses after brief questioning and New York City was bound to honor the certifications, thus ending the regulatory charade.

Another New York precept in the early history of the motorcar banned the new invention from public parks. Eventually a group of motorists brazenly defied the decree by driving into the parks and passing one policeman after another. Completing their tour in triumph, they entered a complaint—because they had *not* been arrested! Thus laughed off, the prohibition against automobiles in New York parks was ended.

Henry Ford was probably the first licensed automobile driver in the United States, according to *Allright Parking News*:

*The police threatened to prosecute him after receiving numerous complaints about the noise and chaos he created when driving through the streets of Detroit while testing the primitive gasoline engine automobile. So Ford went to the Mayor of Detroit, described his dreams of the future for this invention and received a letter allowing him to legally operate his cars within the city limits.*

(In 1986 there were an estimated 125 million drivers' licenses in force in the United States—almost one-fourth of these drivers were under 25 years old.)

Mr. Eno's third "remedy" was that "every livery or public stable should be required" to post a copy of the "Rules of the Road."

His next recommendation, one that was to become a hot political issue later, was that vehicles on north and south avenues of New York

# NOTICE.

DURING THE DAY OF  
OCTOBER 12th

THERE WILL PASS THROUGH YOUR TOWN

## 55 AUTOMOBILES

ON THE  
FIFTH ANNUAL TOUR

OF THE  
American Automobile Association

While this is a TOUR and NOT A RACE, I would suggest that care be exercised to keep unattended

### Children, Pets and Live Stock

OFF THE HIGHWAY.

The tour is run under a schedule of fixed time that does not permit any participant exceeding the legal speed limit over any road.

F. B. HOWER, Chairman Touring Board  
American Automobile Association.

### A Frightening Creation

At the turn of the century, cars were so rare that Barnum & Bailey Circus gave one top billing over a giant, an elephant and a fat lady. Autos were so frightening that New York required a "mature male" to walk ahead of each one, carrying a red flag to alert the populace.—John S. Lang, *U.S. News & World Report*, September 30, 1985.

Rural Yankees (in 1905) regarded all automobiles as creations of the devil that frightened their horses, slaughtered their chickens, turkeys and ducks, fouled the air and covered the countryside with clouds of dust. In fact, 3 years earlier, the state of Vermont had passed a law requiring that a grown man waving a red flag must walk ahead of every automobile while it was in motion.—Rufus Jarman, *Yankee*, May 1972.

By 1908 automobiles were already very much a part of the American scene. Still they were new enough to require warnings such as the one on the right that was posted by the American Automobile Association. A word of warning was considered sufficient for children, pets and livestock with 55 automobiles on their way.



#### ***A Snail After A Greyhound***

Along the Hudson River on Lafayette Boulevard and Upper Broadway, on the fringes of New York City, was where the automobile was a raging terror to horse and man, where drivers of high-powered machines would "tune up" to 10 and 50 miles an hour. A bicycle cop was like a snail after a greyhound when he tried to run down offenders such as these, who went buzzing off into the country, leaving only a laugh and a strong odor of gasoline to reward the panting pursuer.—Ralph D. Paine, *Collier's Weekly*, January 20, 1906.

City have the right of way over those on cross streets.

"The management of traffic in congested places," he added, "such as Fifth Avenue and Twenty-third Street, and Fifth Avenue and Forty-second Street, and many downtown points, should be carefully studied."

At this point Mr. Eno recalled his observations as an 11-year-old and on subsequent British visits. "The London police," he wrote, "perhaps manage in similar places better than anyone else, and their methods should be adopted, and if possible, improved upon. The management of carriages at theaters, the opera and other entertainments should be carefully studied and specially trained experts and competent police assigned to such duties."

He continued: "Carriages should not be allowed to discharge or take on passengers on the left-hand side . . . stages should be obliged to make their stops alongside the right-hand sidewalk and not in the middle of the street.

"The speed of cars and automobiles should be regulated by law. Automobiles have come to stay, but now is the time to restrict their speed to a safe limit."

Although conceding its permanency, Mr. Eno, always a horseman, was reluctant to accept the motorcar. He bought his first machines, a Packard and an Elmore, secondhand to show he had little faith in automobiles. Later, he purchased a Locomobile limousine that had been ordered, but never used, by President Warren G. Harding. His favorite car, however, according to his contemporaries, was a Packard with two bodies, an open touring car in the summer and a closed sedan in the winter. Whenever he went for a ride in either a horse-drawn carriage or an automobile, he was accompanied by a footman and a coachman or a chauffeur.

#### **Eno Always Favored Horses**

In his *The Rider and Driver* essay he flashed his equestrian colors when he wrote: "The cruelty imposed on horses by disregard of these principles ("Rules of the Road") and the consequent hurried and



severe reining up to avoid accidents is worth the attention of us all . . . An ordinance should be passed prohibiting the leaving of horses standing unattended in the street.”

Appealingly, Mr. Eno declared:

*It is hoped that something will be done, and it is urged upon all to do their share. The police are responsible for most of the trouble. The magistrates before whom the offenders are brought have sometimes failed in their duty through ignorance and allowed the offenders to go free, not realizing the importance of the subject. Those few of the police who have attempted to do their duty have been discouraged . . .*

*To accomplish the desired result it is necessary first of all that the public should understand the evil and its causes and demand reform. Second, that the powers that be should have the rules of the road revised; and third, that the police should be directed to enforce them.*

In conclusion:

*Properly understood and regulated, several times the traffic in our streets could go on with less delay, more safety and more comfort than what there is now with practically no regulation and no management. It is time something should be done.*

### **Traffic Campaign Draws Praise**

Adulation for the Eno campaign for traffic control came from newspaper editorials, letters to the editors, and a general public response to the attempt to end the traffic confusion on the streets of New York. Some persons came forward with their own recommendations such as that from an engineer writing to *The Commercial Advertiser*: “He (a superintendent of street traffic) should take up and solve such problems as those which occur every opera night at the Metropolitan Opera House, where there is total absence of all

*William Phelps Eno was an avid horseman. He was reluctant to accept the motorcar and, in contrast to his actions to regulate street traffic, he never drove an automobile.*

proper method in the arrangement of lines of carriages resulting in annoyance and discomfort that could be greatly lessened by intelligent supervision." Mr. Eno, an opera buff, was acutely aware of this problem and put it high on his agenda for correction.

*The Rider and Driver* commented that the Eno "Rules of the Road" "attracted widespread attention of horsemen, bicyclists, automobilists and pedestrians. At the recent convention of bicyclists and automobilists in Madison Square Garden, and at the headquarters in Bartholdi of our esteemed contemporary, *The Wheel*, it was a subject of the liveliest discussion and much warm approval."

*The New York Times*, *The Evening Post*, *The Commercial Advertiser*, Brooklyn's *Daily Standard Union*, *The New York Herald* and other publications reacted favorably. Mr. Eno's close friends addressed congratulatory letters to "Dear Billy." R.N. Wilson said in a letter to *The Commercial Advertiser*: "Mayor Strong made his greatest stroke by appointing a street cleaning commissioner who cleaned the streets; Mayor Van Wyck can rival him by compelling the police to give us orderly streets."

### Public Alarmed by Street Fatalities

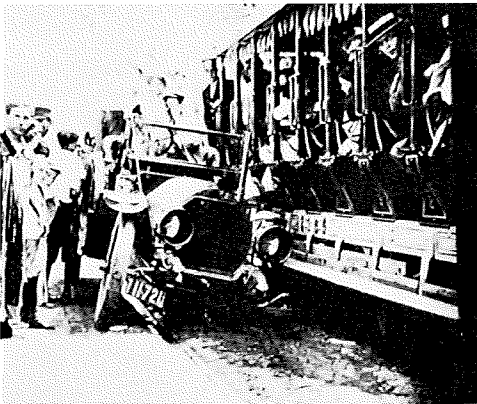
Public opinion focused on traffic carnage. Newspapers featured statistics on street fatalities. *The New York Herald* ran a headline, "Careless Drivers Make Death Traps of Our Thoroughfares and Fill Hospital Beds With Maimed Men, Women and Children."

While writing about the opera situation, Mr. Eno took advantage of the public concern to advocate creation of the office of "commissioner or manager of street traffic," saying that he should be a member of the police force. He should also have "an efficient staff of officers, all the bicycle police, and all other police in control of the general traffic of the streets, and carriages, at public and private entertainments." Almost prophetically he added, "He should keep records of traffic accidents and causes, should receive complaints, control hack and truck stands, driver examinations, issuing licenses, posting rules of the road, and should be outranked only by the Chief of Police."

Excitement over Mr. Eno's campaign for traffic improvement continued to build. *The Yale Alumni Weekly* twice called attention to the public statement of the university's famous son. *The Wheel*, explaining that it had postponed publication until the cycling season, ran a rewrite of the *The Rider and Driver* Eno story on "Rules of the Road" in April 1900. Mr. Eno received support from the League of American Wheelmen's chairman of its Rights and Privileges Committee, Herbert W. Knight of Newark, New Jersey. The New York State legislature began considering laws for traffic control. Mr. Eno published his traffic articles in pamphlets and distributed them to all police captains and fire chiefs in Greater New York, asking for their cooperation.

### Crusade Inspired Sermon on Traffic

Even the churches entered the popular movement for traffic control. The Rev. Dr. Donald Sage Mackay preached a sermon on the subject at Fifth Avenue Collegiate Church at Forty-eighth Street. His title was "Perils of the Street"—physical, moral and spiritual—and the pastor declared that his Scripture selection gave "a flashlight picture of the present-day life of Broadway." The text was from the second chapter of the Book of Nahum, fourth verse, edited from future to present tense: "The chariots rage in the streets, they jostle one against another in the broad ways; the appearance of them is like torches, they run like lightning!"



Traffic mishaps were far more common in the early part of the century than they are today.  
(Source: ITE Journal)

*The Kentucky Farmer and Breeder*, taking note of the Eno recommendations, said that in the Blue Grass State no automobile was allowed to exceed 15 miles per hour, and drivers were required to cut to 6 miles per hour when approaching a crossroad, bridge, or sharp curve, or to 3 miles an hour or a stop if the machine frightened a horse. "If the driver sees a pedestrian or horseman in front, he must sound a horn or bell; he must have a white light in front and a red light in back."

### **Eno Codifies His "Rules of the Road"**

Mr. Eno, following through on his suggestions for safe and orderly traffic, published another article in *The Rider and Driver* in the January 5, 1901 issue. Headlined "Rules of the Road Revised," it codified the proposed regulations into articles and sections suitable for adoption as a New York municipal ordinance. He introduced a few innovations, such as maximum speeds of 10 miles per hour for bicycles, automobiles, and streetcars, 3 miles per hour when making a turn or crossing a busy street, and forbidding horses and all wheeled vehicles except baby carriages from sidewalks and footpaths.

### **Author Expects Quick Adoption**

In the euphoria that accompanied the first Eno pronouncements on traffic controls, the author anticipated that they would become law in about 4 months. Everybody seemed to be in favor of the concept of regulation. The suggestions were like the proverbial better mousetrap of the quotation attributed to Ralph Waldo Emerson: "If a man can write a better book, preach a better sermon, or make a better mousetrap than his neighbor, though he builds his house in the woods, the world will make a beaten path to his door." But Mr. Eno did not anticipate the vagaries of politics with its plagiarism, intrigue, self-seeking special interests, and duplicity.

Rather than months to put his "Rules of the Road" into action, it required years.





*A proposal for an elevated pedestrian crossing at Fifth Avenue and 42nd Street was abandoned in favor of Mr. Eno's traffic regulation solution, where vehicles and pedestrians take turns crossing the intersection of these streets.*





## CHAPTER 4

# Eno Enlists Allies

The unflagging champion of the Eno crusade for adoption of “Rules of the Road” was Samuel Walter Taylor, editor of *The Rider and Driver*, who always addressed Mr. Eno as “Will.”

In 1902, he advocated in an April editorial the adoption of Eno “Rules of the Road” “by every city of importance in the country . . . not only municipal, but the state and national legislatures should give the matter attention.” Referring to the revised “Rules of the Road,” he editorialized in October: “Those codified by Mr. Eno are the perfection of simplicity, condensation and suitability to all conditions of traffic at the present day. President Cantor (of the New York aldermanic Common Council) has given Mr. Eno his assurances that at the earliest opportunity these ordinances will be brought out of committee and, in all probability they will be adopted by its Council.”

### **Borough President Introduces Eno Plan**

Two months later Taylor wrote:

*The Eno “Rules of the Road Revised,” the most carefully studied code on the subject ever compiled, were introduced in the Board of Aldermen by the Hon. Jacob Cantor, president of the Borough of Manhattan, last spring. It has recently been announced that it was learned . . . that the Law Committee of the Board of Alderman will probably report favorably on the ordinance regulating street and road traffic with its provision for a 10-mile-an-hour speed limit untouched . . . The automobilists, horsemen, and bicyclists all favored (an upward revision), urging that 10 miles an hour is really slow and that London, where the street traffic is heavier, has a speed limit of 12 miles an hour.*

Captain Alexander R. Piper, second deputy commissioner of New York City police, just back from a trip to England, reported that London had 17,000 policemen as compared with New York’s 7,000, but he believed that “barring age and obesity, police of New York compare favorably with those of London.” “One reason that they (the Bobbies) do not become fat,” Piper concluded, “is that they are not ‘treated’ by saloon keepers as they are here. An innkeeper there is liable to arrest and his house to lose its license if it is proved that a Bobby has obtained liquor there while on duty.”

Incidentally, late twentieth century critics of the Eno program point out that one glaring oversight in “Rules of the Road” was no reference to penalties for drunk driving. Compelling public opinion against intoxicated drivers,

however, did not reach a crescendo until the era of express highways and high-powered automobiles after World War II.

### **Other Cities Borrow From Eno Code**

Editor Taylor was still optimistic for the early success of the Eno program on January 3, 1902, when he wrote in a *The Rider and Driver* editorial:

*The best traffic ordinance that has been brought to our attention is that worked out during the past 3 years by William Phelps Eno. Police inspectors and captains, Fire Department officials, President Haines of the ASPCA, the daily press and many prominent cities have signified their approval of "Rules of the Road Revised" . . . All that seems to be needed now is to have the Eno code adopted, and afterward enforced, to greatly relieve the surface railway traffic. Who has not seen streetcars stalled for hours by trucks blockaded on the street?*

This reference to streetcar jams will have special significance as the story of the Eno venture into the political arena unfolds.

Meanwhile, scattered cities of the United States began to adopt pieces of the Eno program, among them Colorado Springs and Washington, D.C., and *The Brooklyn Eagle* joined other New York newspapers in support of "the Eno revision of 1900-01 'Rules of the Road.'"

On January 14, 1903, Editor Taylor wrote to "My dear Will" saying that the Eno "Rules of the Road" with a few alterations by Henry A. Robinson, counsel for the Traction Company, would go before the Board of Aldermen with recommendation for adoption at once regardless of anybody else's ambitions to be the "father" of the rules adopted.

### **Plea For Faster Speed Limits**

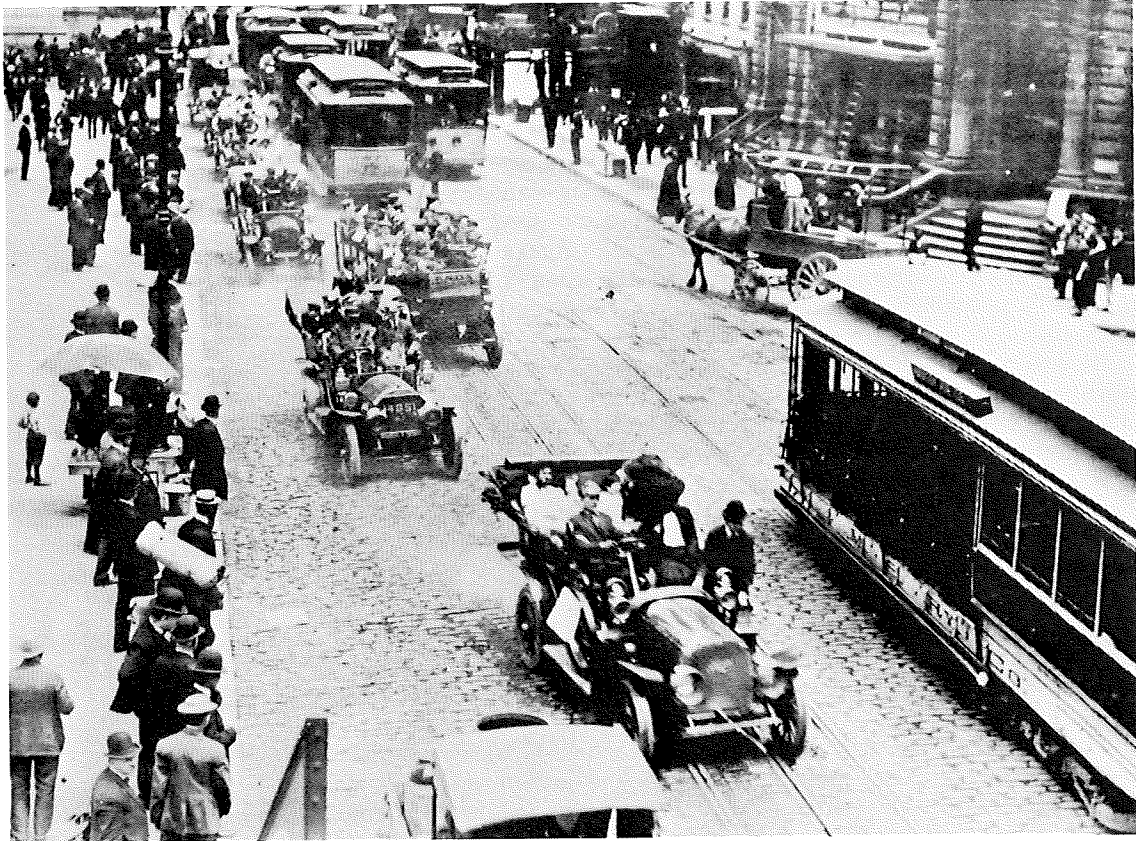
A.R. Shattuck, president of the Automobile Club of America (which later joined the American Automobile Association), told Mr. Eno that he had a conflict, but the club's treasurer, Mr. Seligman, and attorney, Mr. W.W. Niles, would be present and "speak in favor of your ordinance." "There is one point, however, which Mr. Niles will refer to and which we desire to change," he added.

*As you know, the city of New York is some 40 miles long. According to the present law we are compelled to go the length of the city at the rate of 8 miles an hour. It would, therefore, if we kept within the law, take us 5 hours to traverse the city in a northerly or southerly direction. A speed of 8 miles an hour in the congested portion of the city is right and proper and should not be exceeded, but in the suburbs we now have an ordinance before the Board of Aldermen giving us 15 miles an hour in all portions of the suburbs except where the houses are less than 100 feet apart, where we must travel at a speed of 8 miles an hour. We shall seek to amend the ordinance on this point in the committee and trust that you will not object to it.*

Mr. Eno acquiesced in the speed limit changes suggested.

### **Aldermen Appear Unanimous at Meeting**

All New York City daily newspapers reported on the meeting of the aldermanic committee on Laws and Regulations held at City Hall January 19, 1903, to consider adoption of a traffic ordinance incorpo-



*Streetcars were a major element of city traffic during the early part of this century.*  
 (Source: ITE History of Traffic Control Devices)

rating Eno's "Rules of the Road," a matter that had been in political limbo since May 1902. While each newspaper chose a different lead, the consensus was expressed by *The New York Herald*, which said "codifying of a strict set of 'Rules of the Road' was urged by all the interests represented."

The most comprehensive story appeared in *The Rider and Driver*, which said:

*There was a large crowd of notables present, all of whom without a dissenting voice gave Mr. Eno their hearty endorsement. After Mr. Eno had spoken on behalf of the rules, elucidating their various points in a masterful way, commendatory speeches were made by the Hon. Ashley W. Cole, chairman of the (New York) State Railroad Commission; Mr. W.W. Niles, counsel for the Automobile Club (of America); Mr. Orrin Root, representing the Metropolitan Traction Company; Dr. Gill, representing the Road Drivers Association; Mr. Josiah C. Pumpelly, representing the City Improvement Association, and Mrs. Ralph Trautman, representing the Women's Health Protective Association. Alderman Oatman had introduced a set of rules also, but he very generously and magnanimously withdrew them and lent his support to the rules introduced by Mr. Eno. There is little doubt now Mr. Eno's rules will become city ordinances and, as they are the best code that has been devised, the probabilities are that they will be adopted by every important city in the Union, thereby becoming national.*

(The underscored lines in the foregoing paragraph should have been a tipoff to problems ahead.)

The following month Mr. Eno was on an extended trip to Europe and was receiving his mail in care of Monroe and Company, Paris,

France, where he continued his traffic research and services. But his fight for New York's adoption of his proposed "Rules of the Road" ordinance was being pursued by his good friend Editor Taylor.

### **Committee Ignores Eno Code; Publishes Oatman's**

Mr. Taylor was irate when the aldermanic committee on Laws and Regulations, despite the pro-Eno harmony at the January 19 meeting, published a proposed traffic ordinance not sponsored by Mr. Eno, but by Alderman Joseph Oatman. The alderman's version was largely plagiarized from the Eno "Rules of the Road," even including Mr. Eno's published diagrams. But it was different in important respects.

It was partially rephrased, and articles and section designations were changed. All mention of streetcar traffic, which was a main part of the Eno plan, was omitted. Some recommendations were reversed. For example, Mr. Eno gave the right-of-way to north-south avenues of Manhattan; Oatman gave precedence to east-west cross streets at intersections. Oatman's plan allowed driving on the wrong side of the street except when meeting another vehicle. It also omitted police regulation of hack and cab stands and licensing of vehicles, and wiped out proposals to prevent hitching rides on the backs of vehicles.

Editor Taylor posted letters to Mr. Eno in Paris on March 7, 1903, saying that he had an appointment with Alderman Cantor, the Manhattan Borough president, and hoped "to stiffen his backbone to knock Mr. Oatman out."

On the same date, he wrote to General Francis Greene, commissioner of Police in New York City. He called attention to the set of rules suggested by Alderman Oatman, which was published in the official *The City Record* that week. "These were not the rules that were considered at the previous committee hearing and do not cover the ground at all. They are a very bad rehash of some of the rules taken from the Eno set. You will notice that the Eno rules give the management of street traffic to the Police Department, which we think is the proper authority."

### **Taylor Reviews Work on Eno Rules**

On the same date, Taylor wrote to Alderman Cantor as follows:

*The "Rules of the Road" which you kindly espoused and introduced in the Board of Aldermen were the outcome of 3 years' hard work on the part of Mr. Eno and myself. Many hundreds of dollars were expended in printing and postage in circulating these rules among police and fire departments and thousands of citizens, to get suggestions as to what was most needed. When Mr. Eno thought the task complete, he submitted the rules as a whole to the various organizations representing large numbers of persons interested, and received their unqualified approval.*

After citing a list of outstanding citizens and public officials who supported the Eno project, Taylor noted:

*All of these interests were represented at the hearing on Mr. Eno's rules and expressed approval of them at the hearing. That was an advertised hearing, at which all interests could be represented, and there was no consideration of the ordinances said to have been introduced by Alderman Oatman a year ago.*

*If the committee desired to act in good faith and have Mr. Oatman's ordinances adopted, why did it not have these rules submitted at the public hearing mentioned? The truth is that the*

public was overwhelmingly in favor of the Eno rules . . . Now, at the meeting called yesterday and of which even you, yourself, were unaware until the last moment, Mr. Oatman comes forth with still another rehash of Mr. Eno's rules and the committee wishes to have them adopted. I do not see why the committee, to use a slang expression, is so "stuck on" Mr. Oatman and his rules, which you said in the meeting yesterday were "cribbed." (Editor's note: That is, plagiarized or stolen.)

Taylor continued:

*The very first sentence of Oatman's rules indicates a lack of intelligence which has inspired them, and the whole set is crude, badly arranged, and totally insufficient. For example, I do not see how street sprinkling could be considered a rule of the road any more than the laying of asphalt pavements, and yet the subject is introduced.*

*I trust that you will use your powerful influence to see that New York is given something creditable instead of a makeshift and a counterfeit in the "Rules of the Road."*

#### **It's Just a Matter of Politics**

President Cantor answered Taylor frankly, giving him the political facts of the case. "The difficulty we have to contend with," he said, "is that Alderman Oatman is a member of the Board and, of course, wants credit for the rules. Naturally, his associates are willing he should get it. I agree with you that the rules prepared by Mr. Eno are by far the best, and I will see what can be done to have them substituted for Oatman's although it does not look very promising."

#### **Taylor Says Oatman's Plan "Garbled"**

On March 13, 1903, Taylor wrote to Capt. Piper:

*Since your conference with Mr. Eno and myself just prior to your trip to Europe, we have completed the "Rules of the Road," which are now pending before the Board of Aldermen. You will observe we have turned absolute control of street traffic over to the Police Department . . .*

*Since that meeting a snap meeting was called and a badly garbled set of rules, some parts of which, including diagrams, have been cribbed from the Eno rules, was introduced by Alderman Oatman and seems likely to be adopted. These Oatman rules are very inadequate, wretchedly worded, and do not, in any sense, meet the case.*

*I hope you will do all you can to help us get the Eno rules through the Board.*

On the same date, Taylor posted a letter to Mr. Eno in Paris. "I told Cantor that I was willing to do anything to call Oatman off—at which he said he did not know whether Oatman was a moneyed man or not: This was most significant."

Taylor continued:

*Immediately after leaving Cantor, I called upon Mr. Bronson to see if your brother Amos could not reach Oatman and call him off, as I had recalled the fact that Oatman was a tenant of your brother's. Your brother was in Florida but Mr. Bronson, at my suggestion, undertook to communicate with Oatman on the ground that it might be to his advantage, being in the real estate business, to keep on good*

*terms with large real estate operators. This was, of course, done very delicately, and I hope I have not taken too great a liberty in making the suggestion.*

### **Eno Criticized for Leaving Battle Scene**

In the next portion of the letter Taylor in a friendly but firm way castigated Mr. Eno for going to Europe at the peak of the battle in New York's City Hall—for sort of deserting the ship, so to speak, but Taylor used a more colorful metaphor.

*It was most unfortunate that you had to go away at this time. I am afraid that your departure has had a very serious effect on the prospects of getting your rules through the board. It looks like leaving a baby on the doorstep, and the aldermanic committee and, in fact, all the various representatives who were so enthusiastic at the meeting when you were present, "flopped" to the Oatman rules. Shattuck (Automobile Club president) and the rest of his people are only interested in their own especial ordinances and for that reason will veer to any set of rules they think can be got through. With them it is a question of expedience. You may rely upon it, however, that I am fighting, tooth and nail, to get your rules through and have not given up hope.*

### **"Can Tear the Gizzards Out of It"**

There was an evident note of despair in that last sentence of Taylor's letter, but there was a bit of angry determination in the paragraphs that followed:

*The Oatman rules are no better than nothing at all, and if they are adopted would not prevent a substitution of your rules later on, when we have got Oatman out of the way and some intelligent aldermen to take hold and push them through. I am surprised that Cantor has proved so weak. His position (president of Manhattan Borough) should give him a powerful influence in the Board of Aldermen . . .*

*. . . Your absence has a tremendous moral effect. Not with me, of course, but with the aldermanic committee.*

*. . . I have a set of Oatman's rules (published in the The City Record). I can tear the gizzards out of it because it is so crude and incomplete.*

The gizzard-tearing party was set when R.J. Scully, clerk of the Board of Aldermen, mailed notices that a "public hearing on Laws and Legislation on an ordinance regulating rules of the road" meaning the Oatman proposal, would be held at 3:30 PM Friday, March 20, 1903, in City Hall in Manhattan. New York newspapers seemed to take no interest in the meeting, when no affirmative action was taken, but Taylor gave an interesting account in a letter to "Dear Will" in Paris.

### **Taylor Reports to Eno on Meeting**

In part, Taylor said:

*It was all cut and dried to pass a set of rules drafted from yours with some diagrams and "introduced by Mr. Oatman," but on the way to the meeting I had a conference with Capt. Piper and induced him to ask for further adjournment to give him time for considering the matter.*

*I was called upon to speak at the hearing and I roasted the*

*Oatman rules so scorchingly that I think there is not a ghost of a show for their adoption in the garbled form they at first presented.*

*In fact, the committee as a result turned the whole thing over to Capt. Piper, and he tells me today (April 1, 1903) he has been at work on it night and day and has had several conferences with the Merchants Association. When the rules are finally adopted they will be the result of your labors, but with a tremendous job of tinkering by a whole lot of people.*

*Again I must wail how sorry I am you are not here. Oatman "in the Forum" made a spread-eagle speech and said I was simply trying to delay the matter until "Mr. Eno could get back from Europe."*

### **Taylor Blocks Oatman Set of Rules**

In a subsequent letter, referring to his antagonist as "the ignorant ass," Taylor said he "knocked Oatman's rules in the head with a critique that made the aldermen's committee belch fire and brimstone, but what I said was so hot that they could not get away from it. In consequence they turned the whole matter to Capt. Piper (an Eno friend and ally) . . . I think my efforts before the committee prevented him (Oatman) from rushing his ordinance through."

"The Eno rules as approved by Capt. Piper (with minor editing) will now be approved by the Board of Aldermen," *The Rider and Driver* predicted in an editorial dated May 16, 1903. Mr. Eno in a letter from Rome wrote detailed suggestions for alterations in the Piper set of regulations which he had studied in Europe.

### **Comparison: Paris, New York, London**

Mr. Eno wrote from Paris:

*It may be said that the rules are not of as much importance as police supervision and regulation. But it will be found that when the drivers understand the rules, they will become jealous of their rights and resent interference by any other driver being out of his proper place or failing to give the proper signal.*

*It is only needed to watch the London traffic for a short time to realize this. The police are needed principally to stop the line of traffic at street intersections so as to alternate the movement in either direction. The drivers themselves will do the rest when they know what their rights are. The London driver doesn't need any written rules. The curses of his associates will quickly force him into line.*

*In New York scarcely any of the drivers know anything about rules or regulations, and the essential thing is to teach them in the quickest, simplest and most thorough way possible.*

### **Paris Safety Depends on Providence**

Mr. Eno continued, "Here in Paris there is nothing to learn. The wide streets and Divine Providence are the only things that save them except the refuges (traffic safety islands) upon the wrong side, which they know they must not go." He noted, "The police here at the crossings have white gloves which are easily seen and might be advantageous if they are adopted in New York. In London they have a striped band strapped around their cuff which I do not think is as good."

Although some traffic revisions were made in practice under the leadership of Capt. Piper, the Board of Aldermen still had not acted on the Eno "Rules of the Road" in late September 1903.

"From present indications," said an editorial in *The Rider and*





*Driver*, “there is little likelihood of their seeing the light until after the election. Politics has entered into the matter and the city fathers are afraid to do anything that brings them into disfavor with some of the truckmen’s and other similar organizations. It’s a pity that the welfare of three million people should be made subservient to such minor considerations.”

*Paris instituted traffic control measures pioneered by Eno to handle operahouse traffic. Today, special event traffic generators still require unique control measures.*

(Source: Le Miroir)

### **Eno and Piper Plot Maneuver**

Back from Europe, Mr. Eno conferred with Capt. Piper in early October 1903 and they planned an end run around the lawmakers after research showed that police had the authority to make and enforce traffic rules without the formality of a specific ordinance. Mr. Eno spelled out their plans in a letter to Piper dated October 7, 1903:

*You are doing all you can to regulate traffic and put police at congested places. What I want to do is to educate the drivers so that they will know what is required of them by the police, what their rights are and when their rights are infringed upon by other drivers.*

*What I propose is to have printed the enclosed or improved form in large numbers, say 10,000 or more, and have them issued for the guidance of drivers.*

Mr. Eno offered not only to write the regulations adopted from his “Rules of the Road?” but to pay for the printing and let the police be in charge of distribution.

Mr. Eno continued: “I think then it will be well for you to request the aldermanic committee to withhold action for the present on the grounds that temporary instructions are being issued for the guidance of drivers.”

These “temporary instructions” were submitted to Piper for editing or approval by Piper and Commissioner Greene. “I put in every-



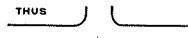
# POLICE DEPARTMENT

## Rules for Driving and the Regulation of Street Traffic

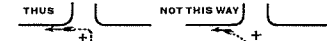
ISSUED BY THE POLICE DEPARTMENT OF THE CITY OF NEW YORK

### Article I. Importance of Keeping to the Right, Passing, Turning, Crossing and Stopping.

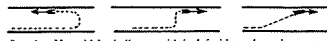
- Sec. 1. A vehicle, except when passing a vehicle ahead, shall keep as near the right-hand curb as possible backing.
- Sec. 2. A vehicle meeting another shall pass to the right.
- Sec. 3. A vehicle overtaking another shall pass on the left side of the overtaken vehicle and not pull over to the right until entirely clear of it.
- Sec. 4. On an avenue or street, divided longitudinally by a parkway, walk, sunkenway or viaduct, vehicles shall keep to the right of such division.
- Sec. 5. A vehicle turning into another street to the right shall turn the corner as near the right-hand curb as practicable.



Sec. 6. A vehicle turning into another street to the left shall turn around the center of intersection of the two streets.



Sec. 7. A vehicle crossing from one side of the street to the other shall do so



- Sec. 8. No vehicle shall stop with its left side to the curb except on established cab, hack and truck stands, and in streets where and when one-way traffic is directed by white arrow signs.
- Sec. 9. No vehicle shall stand backed up to the curb except when actually loading or unloading, and if said vehicle is horse-drawn and has four wheels, the horse or horses must stand parallel to the curb and faced in the direction of traffic, but no vehicle shall stand so backed up if it interferes with or interrupts the passage of other vehicles or street cars.
- Sec. 10. No vehicle, unless in an emergency or to allow another vehicle or pedestrian to cross its path, shall stop in any public street or highway, except near the right-hand curb thereof and so as not to obstruct a crossing.
- Sec. 11. No vehicle shall back to make a turn in any street, if by so doing it interferes with other vehicles, but shall go around the block or to a street sufficiently wide to turn in without backing.

### Article II. Signals.

- Sec. 1. In slowing up or stopping, a signal shall be given to those behind by raising the whip or hand vertically.
- Sec. 2. In turning, while in motion, or in starting to turn from a standstill, a signal shall be given by raising the whip or hand, indicating with it the direction in which the turn is to be made.
- Sec. 3. Before backing ample warning shall be given, and while backing unceasing vigilance must be exercised not to injure those behind.
- Sec. 4. One blast of police whistle indicates that north and south traffic shall stop and that east and west traffic may proceed. Two blasts that east and west traffic shall stop and that north and south traffic may proceed. Vehicles and street cars shall stop so as not to interfere with the passage of pedestrians at the crossings. Three or more blasts is a signal of alarm and indicates the approach of a fire engine or some other danger.
- Sec. 5. No vehicle shall be used on any street or highway unless provided with lights and sound signals as prescribed by law.

### Article III. Right of Way.

- Sec. 1. Police, Fire Department, Fire Patrol, Traffic Emergency Repair, U. S. Mail vehicles and Ambulances shall have the right of way in any street and through any procession.
- Sec. 2. Subject to Sec. 1 of this article, everything being equal, all vehicles and street cars going in a northerly or southerly direction shall have the right of way over all vehicles and street cars going in an easterly or westerly direction.
- Sec. 3. Subject to Sec. 1 of this article, street cars shall have the right of way between cross streets, over all other vehicles; and the driver of any vehicle, proceeding upon the track in front of a street car, shall immediately turn out upon signal by the motorman, driver or conductor of the car.
- Sec. 4. No vehicle or street car shall so occupy any street as to interfere with or interrupt the passage of other street cars or vehicles.
- Sec. 5. No vehicle shall stand headed, or be driven, on any street marked by a white arrow sign except in the direction indicated by the arrow; but it may stop at either curb during the hours indicated on the sign, the usual rule of right side to curb being in force at other hours.
- Sec. 6. No vehicle shall be driven, during crowded traffic hours, on any cross-street, where there are car tracks, except for such distance as may be reasonably necessary to reach the building to which it is going.
- Sec. 7. A vehicle waiting at the curb shall promptly give place to a vehicle about to take on or let off passengers.
- Sec. 8. The driver of a vehicle, on the approach of a fire engine or any other fire apparatus, shall immediately draw up said vehicle as near as practicable to the right-hand curb and parallel thereto and bring it to a standstill.
- Sec. 9. The driver of a street car shall immediately stop said car and keep it stationary upon the approach of a fire engine or other fire apparatus.

### Article IV. Speed.

- Sec. 1. No vehicle shall proceed at any time at a greater speed than the law allows and is safe and proper under the conditions then obtaining.
- Sec. 2. No vehicle shall cross any street or avenue running north and south or make any turn at a speed rate exceeding one-half its legal speed limit.

### Article V. Overtaking Street Cars.

A driver of a vehicle overtaking a street car shall exercise due caution not to interfere with or injure passengers getting on or off said car.

### Article VI. Control of Horses.

- Sec. 1. No horse shall be unattended in any street or highway unless securely fastened or unless the wheels of the vehicle to which he is harnessed are securely tied, fastened or chained, and the vehicle is of sufficient weight to prevent its being dragged at a dangerous speed with wheels so secured.
- Sec. 2. No horse shall be unbridled in any street or highway unless secured by a halter.
- Sec. 3. No one shall remove a wheel, pole, shaft, whiffletree, splinter-bar or any other part of a vehicle or any part of a harness, likely to cause accident if the horse or horses start, without first unbracing the horse or horses attached to said vehicle.
- Sec. 4. No one shall cease to hold the reins in his hand while riding, driving or conducting a horse.

### Article VII. Vehicles.

- Sec. 1. No one shall drive a vehicle that is so covered in or constructed as to prevent the driver thereof from having a sufficient view of the traffic following and at the sides of such vehicle.
- Sec. 2. No one shall drive or conduct any vehicle in such condition, so constructed, or so loaded as to be likely to cause delay in traffic or accident or injury to man, beast or property.
- Sec. 3. No one shall so load a vehicle, or drive a vehicle so loaded, with iron or other material that may strike together without its being properly "defaced," so as to cause no unnecessary noise.
- Sec. 4. No one shall drive a public, numbered, licensed or business vehicle, who is less than sixteen years of age.
- Sec. 5. No one shall ride upon the rear end of any vehicle without the consent of the driver, and when so riding no part of the person's body shall protrude beyond the limits of the vehicle.

### Article VIII. Condition and Treatment of Horses.

- Sec. 1. No one shall ride or drive a horse not in every respect fit for use and capable for the work upon which it is employed and free from lameness or sores calculated to cause pain, or any vice or disease likely to cause accident or injury to person or property.
- Sec. 2. No one shall ill-treat, over-load, over-drive, over-ride or cruelly or unnecessarily beat any horse.
- Sec. 3. No one shall crack or so use a whip as to annoy, interfere with or endanger any person or excite any horse other than that which he is using.

### Article IX. The Respective Rights and Duties of Drivers and Pedestrians.

The roadbeds of highways and streets are primarily intended for vehicles, but pedestrians have the right to cross them in safety, and drivers of vehicles and street cars must exercise all possible care not to injure pedestrians. Pedestrians should, on their part, never step from the sidewalk to the roadbed without first looking to see what is approaching, and should not, needlessly, interfere with the passage of vehicles or street cars.

By crossing a street as nearly as possible at right angles, preferably at a regular crossing, and when a traffic policeman is stationed there, by waiting for his signal, pedestrians will greatly aid to their own safety, facilitate the movement of traffic, and make it much less difficult for the horses, which often have to be reined in suddenly and painfully to avoid careless and unthinking pedestrians. Nothing in the foregoing should excite drivers from constant vigilance to avoid injury to pedestrians under all conditions.

### Article X. Definitions.

- Sec. 1. The word vehicle includes equestrians, led horses and everything on wheels or runners, except street cars and baby carriages.
- Sec. 2. The word horse includes all domestic animals.
- Sec. 3. The word driver includes the rider and driver of a horse, the rider of wheels and the operator of a motor vehicle or street car.

### Article XI. Obedience.

- Sec. 1. Drivers of vehicles and street cars must at all times comply with any direction by voice or hand, of any member of the Police Force, as to stopping, starting, approaching or departing from any place; the manner of taking up or setting down passengers or loading or unloading goods in any place.
- Sec. 2. Ignorance of these rules shall furnish no excuse for disregarding them.

Copies of these rules can be obtained at the Bureau of Street Traffic and at all Police Stations.

For further particulars see Charter of the Greater City of New York, Penal Code, Sanitary Code and City Ordinances.

All drivers of vehicles are required to comply with these rules in order to facilitate traffic, prevent blockades, avoid accidents and loss of life, and diminish the loss of time and money due to the lack of observance of rules for the regulation of street traffic.

The Police Force will strictly enforce the foregoing rules.

Complaints against drivers of cabs and other numbered vehicles should be made at the nearest Police Station, for record at the Bureau of Street Traffic.

THEO. A. BINGHAM,  
Police Commissioner.

February 8, 1909.

thing I thought was necessary," Mr. Eno said, "and left out everything that I thought might antagonize the truck drivers or others. It is short, concise, and I believe it contains all the most important points and is sufficient for the present needs."

Unknown to the principals at this time was that unconnected events were contributing toward a climax to conflicts generated by the traffic issue. One of them was a scare campaign conducted by *The New York Herald*. It opened October 16, 1903, under the headline, "Murderous Condition of Traffic in Our City Streets." "In any other metropolis of the world," the editorial said, "such maimings and killings as a result of the state of traffic in New York streets would excite a popular uprising."

Traffic deaths of two prominent men set off the campaign. "We have become so familiar with accidents and deaths under the wheels of our cities that the slaughter of these well-known men scarcely

deserves a passing comment," *The Herald* observed, "while less conspicuous persons go unnoticed . . . Existing conditions with constant delays and stoppages and imminent perils to pedestrians are absolutely intolerable and must be abolished at all costs." This editorial marked the beginning of a daily drumbeat campaign to warn the public of the dangers of continued unbridled chaos in New York streets.

Later in October another development promised to make New York more aware of traffic regulations. Piper and Mr. Eno, with Mr. Eno paying the bill, ordered 100 blue and white enamel signs to be attached to lampposts and electric light poles on main thoroughfares. The signs directed: "Slow Moving Vehicles Keep Near Right-hand Curb" (the most elementary of Eno "Rules of the Road") and advised drivers that copies of the new "Rules of the Road" cards could be obtained at any police station.

The card of rules became official with the signature of Francis Greene, police commissioner, who wrote this notice: "All drivers of vehicles are requested to comply with these rules in order to facilitate traffic, prevent blockades, avoid accidents and loss of life, and diminish the loss of time and money due to the lack of observance of the rules and regulations of street traffic. Members of the police force will strictly enforce the foregoing rules." Twenty thousand copies of "Rules for Driving" were ordered immediately.

In order to expedite the posting of the blue and white traffic signs, Mr. Eno offered Messrs. Samuel Buckley, and Company of New York City, "seventy-five cents extra for every one of those signs you have in place on or before November 17, fifty cents apiece November 21, and twenty-five cents apiece November 24."

A significant sentence appeared in a brief story in *The New York Evening Telegram* of November 18, 1903. It read: "'Rules of the Road,' tied up now in the Committee on Laws and Legislation (of the New York Board of Aldermen), will be transferred to the Committee on Streets and Highways with instructions that action be taken."

Reactions from the nine aldermen on the Laws and Legislation Committee were quick and positive. They told *The New York Herald* (November 20, 1903) that they were unanimously in favor of the proposed "Rules of the Road" ordinance and six pledged to vote for it. They gave various excuses for their 1-year failure to accept the proposals. These included objections from other members of the committee, a delay until Deputy Commissioner Piper returned from Europe, requests for changes by several special interest associations and the press of other legislative demands.

## CHAPTER 5

# Eno Forces Score Victory

Mr. Eno had feared that the year-end change in the city administration would be a setback for road safety and efficiency, but long-time Eno friend Robert A. Sands, M.D., reassured him, saying in a letter: "I don't think you will find the change in administration will put your cause back as much as you fear, for, while Tammany may be corrupt, they are pretty good people in some respects and are smart enough to realize that the traffic of New York must be regulated."

*The Brooklyn Eagle* of the previous day advised editorially: "Let Capt. Piper wait until Colonel McClellan is Mayor, then the municipal wheels will begin to turn again."

While awaiting action of the Board of Aldermen on a "Rules of the Road" ordinance, Mr. Eno's friend, Samuel Taylor, could not resist the urge to take another crack at his adversary, Alderman Oatman, who had preempted the Eno "Rules of the Road" ordinance by introducing a plagiarized copy of his own in the aldermanic Laws and Legislation Committee. Referring to the Oatman version Taylor exclaimed, "Ye gods! They were typical of the old aldermanic regime, full of inconsistencies, redundant expressions, bad grammar and, on the whole, a botch. In fact, the only grammatical part of the whole lot was the diagrams which had been 'lifted' from the (Eno) rules introduced by President Cantor."

Taylor's comment appeared in a December 2, 1903, letter to the editor of the *Brooklyn Standard Union*. On the same date Capt. Piper (the Eno-Taylor choice for New York's first Commissioner of Traffic), wrote to Taylor in criticism of negativism in the Board of Aldermen.

"All the fuss and feathers about the 'Rules of the Road' will absolutely amount to nothing," Piper said. He continued:

*In the first place, there is a great deal of opposition on the part of McCall and several others to fight anything I put up, and their opposition is of sufficient strength to kill the efforts of Oatman, Matthews, and any others that would support anything that the Tammany members think I am interested in. For that reason I have simply kept away from there and dropped it.*

*I think Matthews is playing one of his old bluff games, and really doesn't intend to do anything. Oatman is a negative of the strongest negative character. To be on the safe side, I will try to find out what Oatman and Matthews are really trying to do. I think myself that the best thing is to have nothing done during the remainder of the administration.*

## “Rules of Road” Logjam Breaks

Mr. Eno wrote to Police Commissioner Greene on December 2, 1902 about the “growing demand for our folders (‘Rules for Driving’). Fifteen thousand have been printed and more are on order.” But, “I am very much disappointed and disgusted that the signs have not been finished and put up. It seems as if some influence were at work to delay them until you go out of office.” (The deadline had passed for the Buckley firm to collect the Eno bonuses for early delivery.) The main purpose of the letter was to ask Greene to assign more mounted men to traffic.

During the pre-Christmas shopping season of 1903, New York newspapers in general, and *The Herald* in particular, came down hard on fatalities and injuries caused by vehicular chaos on New York streets, adding urgency for adoption of a city code of traffic safety and regulation.

On December 8 the Eno “Rules of the Road” broke out of the political logjam that had existed for nearly 2 years. *The Herald* used the event as a self-promoter. Its headline read: “Aldermen Pass New Road Rules — Board Stirred to Action by *Herald’s* Agitation for Better Control of Traffic—Mayor Will Approve, He Is Already on Record in Favor of the Ordinance Long Under Consideration—All Vehicles Are Affected — Article to Keep Commercial Wagons Off Fifth Avenue Is Not Incorporated.”

The first paragraph of the story read: “Stirred to action by *The Herald’s* warnings against the traffic peril of New York, the Board of Aldermen yesterday (December 8) took the first step to enact measures tending to street congestion and lessen the danger to the lives of men, women and children of the city, 538 of whom were struck, crushed and ground to death by streetcars, trucks and other vehicles in the city’s streets during the last year.”

By a vote of 46 to 6 the aldermen passed the ordinance and sent it to the Mayor for his signature. It was ironic that Alderman Oatman, who had tried to sabotage the Eno code with his own plagiarized replacement, made the motion for adoption. *The Herald* had previously credited Mr. Eno with “Rules of the Road,” but made no mention of him in the story on his victory.

## Oatman Calls Up Eno “Rules of Road”

“It was not without considerable trepidation that Alderman Oatman, who originally introduced the ordinance, rose from his seat at yesterday’s meeting and called up Special Order No. 140,” *The Herald* said. “Mr. Oatman knew that a simple objection to any point could serve to tie up the entire set of regulations, which were destined to cover every form of traffic in the city.

“I believe that the ordinance conforms to everything that is required,” Alderman Oatman said, “The objectionable features have all been eliminated. I haven’t heard of any objections and I sincerely hope that the ordinance may be adopted today.”

## Near-Side Streetcar Stops Opposed

*The Herald* reported that Alderman Doull objected to the section relating to streetcars, which read: “Surface cars shall stop only on the near side of the street and before reaching the crosswalk, to discharge or take on passengers.” Doull feared car passengers would be compelled to step into snow heaps or puddles of water. (It was customary for streetcar passengers to enter and leave at the rear door of the streetcar. Snow was usually piled near the curb, right up to the intersection crosswalk area.) He moved that the word near be

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## *Eno’s Opera Plan Works Wonders*

*The New York Herald* announced a resounding success for an early Eno traffic proposal whose time had come. “When the curtain fell on ‘Die Walquere’ this morning,” the newspaper reported, “there was no scene of confusion in front of the Metropolitan Opera House. Traffic was not impeded along Broadway, and in less than half an hour the last of the operagoers were driven away in their carriages. This was due to a new scheme (invented by Mr. Eno) put in operation yesterday by Police Commissioner Greene at the suggestion of Deputy Commissioner Piper.”

Twenty-two policemen were stationed at corners to handle the traffic of 700 cab and carriage drivers.

Improved opera house traffic conditions prompted a fan letter to Mr. Eno. It read:

*Me know, Mr. Eno  
He one man mighty slick,  
He make opera people  
Get out plenty damn quick.*

stricken out and "far" substituted.

Alderman Sullivan protested in favor of cars stopping at the near side of the crossings. Alderman Oatman said the streetcar companies had expressed their willingness to comply with the proposed regulation, "which they view favorably."

Alderman Wirth of Brooklyn noted that his constituents were used to having cars stopped at the near side, and if this regulation was changed chaos would result.

Doull's motion was defeated, but a compromise was effected by eliminating the word "only" from the section, making it possible for cars to stop at either side of the crossing. Alderman Oatman reminded the Board that nearly 80 percent of the street fatalities could be avoided if cars stopped at the near side.

Scarcely had this point been decided when Alderman Meyers objected to the use of skids on sidewalks during the process of loading or unloading wagons.

Innumerable objections in previous meetings had heretofore sealed the fate of the "Rules of the Road," and proponents of the measure began to despair at the prospect of a lengthy argument which would only postpone the matter again.

"*The New York Herald*," said Alderman Doull, "has tried for months and months to have this ordinance passed. Don't let us hold the rules up by discussing legal squabbles. This section is not intended for Broadway. The matter is in the control of the Police Department, which will not permit the obstruction of sidewalks."

Alderman Oatman objected to a motion to lay the matter over for a week. He reminded the aldermen that they had been postponing action on the ordinance for nearly 2 years. He called for a vote.

Forty-six members voted in the affirmative. Alderman Meyers was among them. He explained his vote by saying he approved the entire act with the exception of the rule relating to the use of sidewalks, which he hoped might be amended. There were only six votes in the negative.

### **Fornes Declares Ordinance Adopted**

"President Fornes," *The Herald* reported, "declared the ordinance adopted. To become a law it has to have the approval of the Mayor. Mayor Low is known to favor the regulations and will sign them within the next 10 days. They are to take effect immediately."

*The Herald* played the story on the front page under a six-deck headline. It was accompanied by a diagrammatic picture showing how vehicles must move under the rules at the Broadway, Sixth Avenue and Thirty-fourth Street intersection. The drawing revealed 15 streetcars, 30 horse-drawn vehicles, but not one single automobile.

### **Ordinance Backers Celebrate Victory**

In a side story *The Herald* said:

*Great was the rejoicing among the men who fathered the "Rules of the Road" and have made untiring efforts to perfect them when they learned that the Board of Aldermen had passed them. Members of the Chamber of Commerce and the Board of Trade and Transportation joined in congratulating The Herald.*

*Alderman Oatman said: "I'll go out of the board satisfied now. I've been working on this ordinance until I was commonly known as 'Rules of the Road.' I think this is the best thing the present board has done and its action was certainly due to The Herald."*

*The Brooklyn Eagle* had a brief story under a small headline.

“Several Brooklyn members, including Aldermen Wafer, Wentz and Brenner, voted against the new rules,” the paper said.

*The New York Sun* had a small headline and a short story that epitomized the law.

*The New York Times* had a 12-point headline (a sixth of an inch) and three paragraphs.

### **Eno’s Revisions Are Presented**

The day after the Board of Aldermen passed the ordinance to Mayor Low for his signature, Mr. Eno wrote to the Mayor.

*Most of the clauses are taken from mine but with wording somewhat changed.*

*The little folders I had printed and which are being issued by the Police Department are, so far as they go, a revision of my proposed ordinances. It does not much matter about the differences in wording except that it would be, perhaps, as well to have the ordinances and the police instructions uniform. What is serious, however, is the interpolation of several clauses which will work mischief and the omission of others which are the most needed at this time.*

*I am in hopes that this whole subject will be taken out of the hands of the aldermen permanently and without unnecessary delay. Capt. Piper and I were at work most of yesterday afternoon revising the ordinances and again today.*

### **Eno’s Traffic Signs Suddenly Posted**

Three days after the “Rules of the Road” ordinance was passed by the Board of Aldermen, the suspicious delay in posting Eno traffic signs in New York was ended when the right-hand driving instructions were posted on traffic arteries.

At the same time it was announced that New York’s Apollo Squad of mounted traffic policemen would soon be in strength on the streets.

Said *The New York Herald* of December 11, 1903: “Fifth Avenue next week will have a mounted police squad which will be an ornament to the thoroughfares and whose duty will be the enforcement of the new ‘Rules of the Road’ . . .”

The report noted that these policemen were being selected with great care. Good horsemanship was not the only qualification: men of youth, intelligence, and good address were chosen. “They must have a dignified carriage and a manner that will enforce obedience to a nod, a look, or a wave of a gloved hand . . . Horses will be the pick of the police stables and they will be groomed and caparisoned in keeping with the requirement of the city’s show thoroughfare.”

### **Eno Amendments Become Law**

Before signing the “Rules of the Road” into municipal law, Mayor Low made amendments to reclaim Eno regulations that had been changed or omitted in the earlier revision. One of them restored the right of way to north-south traffic on the avenues. As originally passed by the aldermen, Broadway’s heavy traffic would have been held up by any wagon that wanted to cross.

Mr. Eno sent the Mayor “a list of the changes which seem necessary to free them from serious objections.” The Mayor decided that the proposed amendments would not interfere with formal approval of the rules and affixed his signature. On December 15, 1903, *The New York Herald* ran the headline:



*The Apollo Squad in New York City (1902), whose organization was instigated by William P. Eno, was America's first mounted traffic police unit. It was famous for the outstanding characteristics of its recruits, their horsemanship and the quality of their horses.*

*Eno promulgated rules for "New York's finest" "to see that traffic is not delayed by vehicles loading or unloading, or being backed up to the sidewalk." In 1903, New York City established a Bureau of Street Traffic and by 1908 they had 743 men, 138 of these were mounted and 18 had bicycles.*

*In order to regulate traffic Eno set forth manual and whistle signals for officers that, interestingly enough, were later adopted in some of the first traffic signals.*

### Mayor Low Makes "Rules of the Road" A Binding City Law

The first written traffic ordinance in history was in effect, providing a pattern for cities on both sides of the Atlantic and the Pacific.

On December 17, 1903, Samuel Taylor, editor of *The Rider and Driver* and *Outdoor Sport*, wrote a letter of thanks to William Randolph Hearst, editor of *The New York American*, saying: "The ordinances signed by Mayor Low yesterday, with the exception of one or two slight changes, are the same as those formulated by Mr. W.P. Eno and advocated from time to time in your column."

### Christmas Present for New York

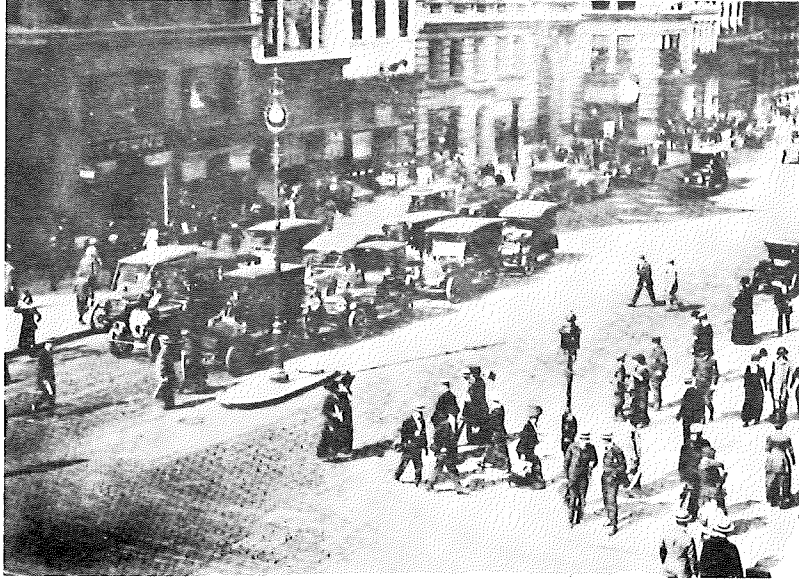
*The Rider and Driver* had a cover picture of Mr. Eno "to whose Public Spirited Labors During the Past 4 Years Are Due the New Rules of the Road and the General Movement for Improvement of Street Traffic in New York?"

The accompanying editorial was titled, "The City's Christmas Present — Road Rules," and said, in part: "The City of New York has just received a Christmas present, through the efforts of one of her moral heroes, that will rank among the good deeds of men . . . This was the final adoption of an ordinance for which one public-spirited citizen, who happens to be a high-minded sportsman, had been striving during the past 4 years?"

### Aldermen Repeal Near-Side Trolley Stop

One Eno suggestion that was not followed was his ordinance section for near-side streetcar stops. Under the old far-side system the trolley was halted short of the street for traffic to pass, then stopped on the other side to load and unload passengers. The Eno recommendation would eliminate one stop, speed up the car service, and prevent many accidents.

But women's clubs objected vigorously, so vigorously, in fact, that every newspaper in the city and most electable politicians joined the hue and cry against the near-side system. The reason: women's skirts



were dragging in mud and slush alongside the streetcars. The near-side regulation lasted only a quarter of a year, the snow months of January, February and March, before it was repealed by unanimous vote of the Board of Aldermen. Mr. Eno did not put up a fight on the issue. He reserved his fire for refinements in the adopted system, such as improving the status of the traffic department by putting it exclusively under a commissioner. His basic regulations remained intact.

### Eno Reveals Early Frustrations

Mr. Eno's "Rules of the Road" finally had won, although by a backdoor approach. A year after his New York victory for "Rules of the Road," Mr. Eno appraised his campaign. He said in a March 24, 1904, letter to a friend:

*During the past four years I have been working to ameliorate the street traffic conditions of the city of New York. My efforts have resulted in exciting public interest and considerable has been accomplished. The block system has been established at important crossings. Enamelled signs instructing slow moving vehicles to keep near the right-hand curb have been put up. Mounted police are on Fifth Avenue. My plan for management of carriages at theaters is in force and I have had printed 70,000 folders of "Rules for Driving" which have been issued by the Police Department.*

On December 16, 1904, he wrote to his longtime pen pal, Alfred Edward, Superintendent of Traffic in the city of Sydney, Australia, noting that when he began his work in 1900, vehicles were tied up for hours at a time in the uptown thoroughfares. Within the past year, however, Eno witnessed no blockade that lasted more than one minute "except on streetcar lines where something happened to a car or at the power station." He continued, "One can have no idea what an amount of work it requires to put a civic reform through till he tries it, especially if he holds no public office to help him . . . Now most of my suggestions have been followed, though some of them in a rather crude way."

(Mr. Eno told inquirers that the only existing literature on street traffic control was what was written by Superintendent Edward or

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*The "block" system as used in New York was advocated by Mr. Eno. All vehicular traffic stops to allow pedestrians to proceed.*

(Source: ITE History of Traffic Control Devices)



“the things that I published in the last 6 years.”) He bared his feelings in 1909 in a letter to Arthur T. Hadley, president of Yale University, when he wrote:

*Had I not, when at my wit's end and thoroughly discouraged, discovered through an examination of the City Charter, Penal and Sanitary Codes, that the Police Department had ample authority to regulate traffic in New York without the help of the Board of Aldermen, it would still be waiting for the aldermen to pass the necessary ordinances and the regulations which I prepared and which are now in force in New York, Boston, Louisville, Lexington (Kentucky) and more or less in most of our cities, would still be hung up and the traffic in New York with its tremendous increase at a standstill, the business of the city impossible and the tremendous death toll as it existed a few years ago, multiplied.*

*The greatest difficulties that I have met with in my unofficial capacity were to make those in authority realize the importance of what was new to them.*



## CHAPTER 6

# Mr. Eno Goes to Washington

During 1904 Mr. Eno moved his residence from New York to a town house at 1775 N Street Northwest in Washington, D.C., where he was in better position to consolidate his gains and broaden his base. The great room of the Washington residence is duplicated, even to the mantelpiece, in the directors' room of the headquarters of the Eno Foundation for Transportation at Westport, Connecticut.

Mr. Eno did not expect a rough time in persuading Washington to accept traffic controls because the nation's capital, he said, "is free from the political conditions to be fought in trying to establish any needed and desirable improvement, and should furnish an example in having all that is best." He understated the role of Washington's municipal politics.

### Eno Snubbed by Commissioner McAdoo

Mr. Eno spent his first year in Washington establishing contacts, but making frequent visits to New York to boost his program there.

On one such trip he had an appointment with the newly appointed New York City Police Commissioner, William McAdoo, whom he had written twice without an answer. (Mr. Eno had been cordially received by Mr. McAdoo when they were first introduced by Admiral Schley.) But when Mr. Eno arrived at McAdoo's office for a prearranged meeting he was told tartly that McAdoo had gone to City Hall and would not be available. Mr. Eno returned to his quarters at the University Club and wrote McAdoo a scorching letter.

*You do not seem to appreciate the importance of my overtures. This, aside from your official position, which should prompt you to welcome all assistance possible, is quite as incomprehensible as your indifference to the simple forms of etiquette.*

*In one important essential (allowing the New York traffic situation to drift back into chaos) you have shown yourself absolutely unfit . . .*

*I regret exceedingly to be compelled to write to anyone such a letter; I have never had occasion to do so before, but you have left me no alternative.*

*Trusting that I may have the honor of being permitted to change my present opinion of you, the color of which your intelligence should indicate when you consider the facts herein stated . . .*

The only response was a letter from McAdoo's secretary accepting blame for the mix-up.

Mr. Eno did not have to wait long to reach New York's top police authority. McAdoo was pressured to turn in a

resignation and was succeeded by Mr. Eno's friend, General Theodore A. Bingham. Mr. Eno, referring to the forced retirement of McAdoo, said, "I believe his mismanagement of street traffic had a great deal to do with it."

(Commissioner McAdoo is not to be confused with William Gibbs McAdoo, former U.S. Secretary of the Treasury, who was twice a deadlocked candidate for the Democratic nomination for President, 1920 and 1924. New York City Police Commissioner William McAdoo, a native of Ireland, was a former New Jersey Congressman, Assistant Secretary of the Navy, 1893-97, and became Chief Magistrate of New York City in 1910.)

### **Eno Maintains Interest in New York Traffic**

Among the causes supported by Mr. Eno in his visits to New York were:

1. Pressing the need for either subways or elevated tracks for all crosstown public transit.
2. Establishing more cab stands to eliminate "wasteful cruising" by taxis.
3. Following examples of London and Paris in tunnel boring underground facilities (subway tracks and utility lines) without tearing up streets.
4. Endorsing Capt. Piper for a new position of Commissioner of Traffic Police. (This effort failed.)
5. Designing roped-off traffic channels to expedite movement in Union Square.
6. Supporting the successful campaign for state legislation authorizing the Police Department to control traffic regulation in New York City.
7. Placing an absolute speed limit of 30 miles per hour on automobiles.
8. Providing a plan for widening Fifth Avenue to six lanes.
9. Introducing and promoting taxi meters, a new invention.
10. Adding a third crew member to large streetcars.
11. Posting street directions and warning signs.
12. Setting cab tariffs—for automobiles no more for distance, but more than for horse-drawn vehicles for time.
13. Empowering police to issue summons and complaints instead of making arrests.
14. Taxing high buildings according to height rather than value; the greater number of floors, the greater cost for municipal services.
15. Reducing the paperwork of traffic control for greater efficiency and savings.
16. Striving for national laws, or uniform state laws, to govern traffic.

A New York traffic campaign in which Mr. Eno took no part was the one to change speed readings from miles per hour to minutes per mile.

One of the Eno recommendations was that "the driver of a motor vehicle shall, at request or signal by putting up the hand from a person driving, riding, or leading a restive horse, cause the motor vehicle to immediately stop and shut off the power if desired and remain stationary as long as may be necessary to allow said horse to pass." Similar regulations were in effect in several states.

Pointing out that horses were no longer afraid of bicycles—as they had been at first—Mr. Eno predicted correctly that "a few years hence a horse afraid of a motor vehicle may be unusual."

The roping system recommended by Mr. Eno for Union Square was borrowed by Police Commissioner McAdoo to restrict the areas

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### **Leopold Finds Traffic Unfit For A King**

In 1904 automobiles were still a rarity on city streets around the world. In 1900 there were only 8,000 automobiles in the United States. This number increased to 458,000 in 1910, and to 8 million in 1920. Other industrialized countries were experiencing similar growth in automobile traffic.

When an international automobile exhibition was held at Brussels, Belgium, in January 1905, King Leopold, wishing to express his disapproval of chaotic street conditions, rode to the exhibition in a court carriage with four horses instead of his automobile. Traffic management, he observed, was so openly disregarded that progress by an automobile was at times impossible.

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### **The First Speed Trap**

New York City Police Commissioner William McAdoo, in the summer of 1905, was motoring through Massachusetts on vacation when he was stopped by Constable Peabody for speeding. Naturally, he protested that he was driving well within the law.

"Oh no, you warn't!" the constable exclaimed. "You were going 12 miles an hour—4 miles more than the limit—and we can prove it."

The proof amazed and delighted the New York official. He had discovered the first speed trap! He enlisted the help of the rural cop to introduce the system in New York City. Here is how it worked:

Two policemen with synchronized watches hid in lookout posts that were exactly one mile apart and connected by telephone. When a suspected driver passed the first post, the sentry would phone a description of the car and the exact time of its passing to the second lookout. When the car reached the second post, the policeman then immediately checked his chart that translated time for the mile into miles per hour. If it showed more than eight miles per hour, the offending driver was stopped by a third policeman who received a signal from the second lookout.

The system was adapted to Upper Broadway with startling success. Of 3,200 automobiles which passed that way in a month, 140 were stopped for exceeding the speed limit.



*The roping system recommended by Mr. Eno for Union Square was widely copied as an inexpensive and quick measure to control traffic.*

of New York's Curb Market (now the American Stock Exchange). For 40 years brokers traded in unlisted securities from the middle of Broad Street, where their congregation was admittedly a hazard to traffic. On June 5, 1905, the city of New York corralled the 250 traders into a roped-off enclosure 15 x 75 feet, leaving room on each side for traffic to pass. Mounted policemen rode herd on the outdoor activities, which were soon moved indoors. The developments inspired the following verse:

*A broker went broking one day  
On a curb at the foot of the street,  
Where for time out of mind business men of his kind  
Have foregathered in sunshine and sleet.  
He was ready to buy and to sell,  
On commissions he based all his hopes;  
But he had to go back, for he found that, alack!  
He was green and not on to the ropes.*

### **Opinions of Traffic in European Countries**

Mr. Eno continued his periodic visits to Europe. In a 1907 message to the New York Police Traffic Squad he gave his opinions of traffic there.

*It is impossible to regulate anything except by brute force, unless you inform the people to be regulated what you want them to do. Traffic moves more smoothly in England than anywhere, and those who don't know attribute it entirely to the police and the fact that the drivers are amenable to authority. A short time spent driving around London will convince anyone that the drivers themselves are the real regulators of street traffic under ordinary conditions.*

*In Paris just as soon as there are no policemen nearby, everything is confusion. In Germany, Italy and all the continental countries, so far as I know, the conditions are as bad or worse. Wherever any traffic regulations are attempted, money and time are being wasted, all for the want of a little common sense and knowledge.*

Traffic conditions in New York continued to improve. *Collier's Weekly* declared in 1906 that traffic regulation in New York "surpasses in efficiency that of any other large city of the country." *The Rider and Driver* ran a 1907 photograph of New York's mounted traffic squad, calling it "one of the finest bodies of horsemen in the world." The weekly publication added: "From the original 6 mounted men, appointed a few years ago at the suggestion of Mr. William P. Eno, the number has now reached a squadron of 103."

### **New York's Finest Win Syracuse Show**

In 1908 the New York squadron was overwhelmingly victorious in the Syracuse (New York) Horse Show, "the finest open air horse show ever presented in America," said *The Rider and Driver*. The trip, promoted by Mr. Eno, was the first "official exit from the metropolis" by New York mounted police since a small detachment participated in the National Centennial Exhibition of 1876 in Philadelphia.

### **Eno's Aims for National Capital**

While working on various facets of traffic performance in the nation's capital, Mr. Eno revealed his aims in 1906 when he wrote, "I am anxious to inaugurate an ideal traffic system in Washington, as what is done here will be followed elsewhere. Washington is the place

where every branch of civic control and management should be perfect, and where all other cities should come to learn the best methods and practice.”

On June 1, 1908, he wrote his Australian friend, Alfred Edward of Sydney: “District of Columbia Commissioner R.L. West, Chief of Police (Major) Richard Sylvester and James B. Reynolds (New Yorker who was directing a Washington police department reorganization) spent 3 hours at my house and were very much interested in your work and mine. They proposed to make the contents of my folders a national road law if possible, which is what I want.”

Mr. Eno launched his Washington campaign, as he had done in New York, with an offer to pay for traffic signs and pamphlets not covered by a government appropriation. He submitted his offer and recommendations to Commissioner West, who passed the material on to Major Sylvester “to devise regulations in the line of (Mr. Eno’s) suggestions.” That was just a few days before Mr. Eno was to sail aboard the *Kaiserin August Victoria* for a month each in Hamburg, Germany, and Paris, France. When he returned he was kept busy compiling what was to be his first book, dealing with the full range of traffic regulation.

### Washington Rejects Eno Offer of Gifts

On May 10, 1907, Mr. Eno wrote to the company that had made the enameled New York street notices and asked for a quotation for making the signs he planned to present to Washington. But 8 days later the secretary of the Commission of the District of Columbia, W. Tindall, rejected the gift, saying that “acceptance of the offer will be contrary to law, which prohibits the employment of volunteer service and creation of any obligation for which no appropriation has been made.”

“I had no intention of putting the government under any obligation to me,” Mr. Eno told the Commissioner, “but wish to present the signs to the Police Department to assist the work which it has to do.”

Pointing out that the cost of the pamphlets, signs, iron standards, and paper forms for traffic work would be quite considerable, Mr. Eno said, “For whatever of these you have no available appropriation, I am willing to pay and present, provided Major Sylvester can carry out the plans.”

Commissioner West thought it would be best to consolidate Eno and District regulations into a system acceptable to the Commission. “The Commission feels,” he added, “that acceptance of a gift of this kind would be contrary to the spirit of the terms of the law and would not be in keeping with the dignity of a great municipality half supported by the general government.”

The Commission also feared that the placement of signs might make the District of Columbia liable for damages.

### Eno Rejects Washington’s Traffic Abstract

An abstract of regulations relating to traffic in the District of Columbia was sent by Police Chief Sylvester to Mr. Eno, who thanked him and commented, “These regulations are, of course, antiquated and have been gotten up from time to time by people both incompetent and unacquainted with modern usages.”

“All that Congress should do,” he continued, “is to empower and institute the Police Department to regulate street traffic by such rules and enforcement as it, the Department, may deem necessary. The License Board should, of course, be in the Police Department to avoid division of authority. Speed regulation and the regulation of vehicle lights should be under it as should also the examination of

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### Cop Encourages Automobile Chase

It is recorded of a fat New York patrolman on an uptown beat that he hailed a passing automobile with the panting plea:

“A burglar got away from me back here and he’s hotfooting it up the avenue with a good lead. Give me a lift and we’ll pinch him.”

“Glad to oblige,” said the driver, and he whirled the policeman in pursuit. The fleeing thief was not looking for an automobile chase, and he was shortly overtaken, neatly swung into the car by the collar and bowled around to the nearest police station before he could grasp what had befallen him.

—Ralph D. Paine, *Collier’s Weekly*,  
January 20, 1906



*New York City's Mounted Traffic squad at horse show in Syracuse during September 1908.*

drivers of automobiles and other vehicles for licenses and the repeal and supervision of licenses for cause.”

#### **Eno Works on His First Traffic Book**

For the next few months Mr. Eno was occupied with preparation of his book on traffic regulation and making speeches to numerous organizations that invited him. His book was to be the first ever published on the subject. He wrote to Chief Sylvester on August 24, 1909, that his trip to Europe had been delayed until his book was completed, but he would sail on the *Mauritania* September 15 for conferences with police departments in England, France, Germany, and Switzerland. He took with him letters of introduction from various leaders in the transportation field.

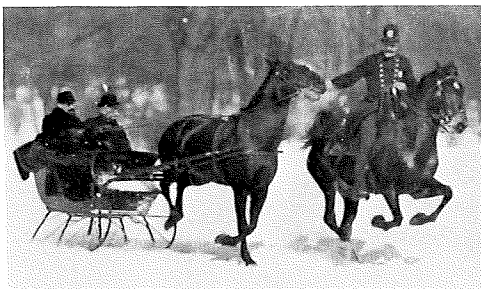
Mr. Eno was overseas when complimentary copies of his book, *Street Traffic Regulation*, were issued to the Police Department, but the distribution was delayed because, as one commentator put it, “there was a lot of sour grapes in the fruit dish.” The author, however, received congratulations and praise from all over.

One of the letters was from the twenty-sixth President of the United States. It read:

*My Dear Mr. Eno:*

*I have received your book on street traffic regulations. You have done a genuinely valuable piece of work. No one can compare the condition of traffic in New York streets, and especially the downtown traffic, after your work was done with that of 10 or 20 years ago without realizing the value of your service to the city. When I was Police Commissioner, I was necessarily in touch with this whole question, and am therefore in a position to recognize what you have done.*

*Sincerely yours,  
Theodore Roosevelt*



*Mounted traffic policeman stopping runaway in Central Park.*

After being appointed New York City’s Police Commissioner in 1895, Roosevelt cleaned up the corruption-ridden police force. However his zealous enforcement of Sunday blue laws—closing saloons—angered many residents.

## Eno Ambitions in Washington

Mr. Eno's consuming ambition was to give Washington, D.C., a traffic system that would be a model for all America. At times he was on the verge of success only to have his efforts annulled by political machination. He asked to put his "Rules of the Road" in force in Washington in 1904, only a year after they were adopted in New York City for what became a standard for the rest of the world.

His efforts to improve street conditions in Washington were thwarted at nearly every turn by special interests—such as streetcar operators who wanted overriding traffic privileges, and team owners who resisted having to display lights at night—and envious political and bureaucratic opponents. He was able to get some improvements—for example, rotary intersections and parking orderliness—but failed at accomplishing the principal object of his desire, which was to establish generally accepted standards of uniform laws that would be adopted nationwide.

He said in 1913 that his fight in Washington was similar to the one he had in New York before his regulations were put into effect by the Police Department, and the one in Paris before "Le Systeme Eno" was accepted there.

## Strategy in National Capital

Capt. Alexander Piper, Mr. Eno's old colleague in the New York campaign, told Mr. Eno that he was approaching the Washington situation in the wrong way by aiming his main criticism at the voluminous nature of existing regulations. "While there are a great many traffic regulations which police are required to enforce," Piper said, "there are among them certain regulations which are primary and which the general public and police should have at their fingertips."

"In order that this matter may be accomplished," Piper continued, "these few regulations should be put out in a folder, not to exceed four pages, that can be carried in the pocket." This was the plan that worked in New York. Another of Mr. Eno's friends, District of Columbia Commissioner Frederick L. Siddons, cautioned him to have patience, saying that delay in official action on police regulations should not be injurious to his cause if he accepted minor changes. Mr. Eno mildly disagreed.

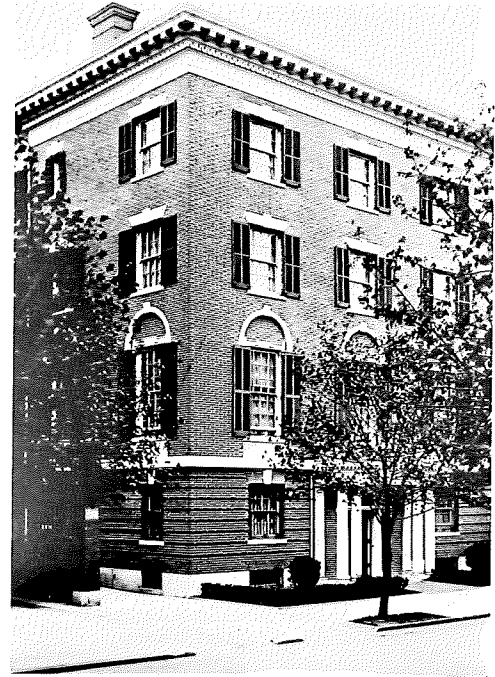
Washington outcries for better traffic control were fostered by a brouhaha that occurred during the Inaugural Week Suffragette Parade in March 1913. A crowd of nonparticipants broke through the ropes and literally mobbed the hiking demonstrators. *The Washington Times* reported that "rowdies mauled the women who walked from New York to this city." Senators demanded to know why police did not protect the marchers and "why the resolution of Congress authorizing the stopping of streetcars and traffic on Pennsylvania Avenue at the time of the parade was not enforced."

"It was disgraceful," said Congressman Richard Pearson Hobson on the floor of the House. "I was told by a woman that a ruffian climbed onto a float and insulted her daughter."

"Her daughter ought to have been at home," Congressman Mann exclaimed, throwing the body of Representatives into an angry uproar.

The outbursts focused public discontent on the handling of Washington traffic.

Major Richard Sylvester, head of traffic in the District of Columbia, was a leading antagonist against Eno proposals. In a letter to *The Washington Star* (September 10, 1914), Mr. Eno wrote:



*This was William P. Eno's Washington, D.C. home at 1771 N Street opposite the Church of the Covenant on the corner of N and 18th streets. After Mr. Eno's death the building was sold to Canada for use by the country's diplomatic corps.*



*It is too bad that Sylvester should be allowed to keep the city of Washington from having a decent set of traffic regulations . . . Washington is the easiest city in the world to regulate traffic in as it has no serious (design) problems. The reason I was so anxious to get Washington in line was more on account of the fact that it is the national capital and would exert some influence on the smaller cities. Since I have gotten up the (suggested) Washington regulations they have been adopted without change in several moderate-sized cities, and the New York regulations are almost identical with them.*

### **Washington's Archaic Laws**

*The Washington Times* in August 1915 declared that Washington had the most archaic traffic laws among the nation's big cities. The newspaper called them "oppressive," and quoted E.L. Ferguson, head of the District of Columbia American Automobile Association Bureau, as saying, "The capital has the most senseless, out-of-date regulations of any city of size in the country."

In 1919 Mr. Eno wrote about his failures to improve Washington traffic.

*Ever since I have been living here (15 years or more) I have been attempting to do something for the betterment of traffic in Washington. When Justice Siddons (D.C. Commissioner) and I worked together some years ago we succeeded in getting an approved set of regulations published, but not efficiently distributed. These were cut in places by the authorities and added to in others, mixing up general with special regulations. Some years ago this set was discontinued and a lengthy pamphlet of 40 pages or more was printed for the purpose, I suppose, of informing the public but not at all suited to the purpose as it was very long and never kept up-to-date.*

*Today, February 2, 1919, I visited seven police stations (in Washington) and found at five of them they had none of the new traffic regulations. At one they had not had any kind for many months and at another they had not had any of the folders of any date for a very long time and did not suppose there were any available, but I was told that if I applied to headquarters I might be able to obtain a copy of the police manual containing them.*

### **After World War I**

Immediately after the World War Armistice in 1918, the Highway Transport Committee of the Council of National Defense asked Mr. Eno to join in an advisory capacity and form a regional committee, located in the District of Columbia, whose first duty would be to compile general highway traffic regulations for standardization. The Committee: F.H. Bugher, former New York City Police Commissioner; William J. Eynon of Byron Adams Company and an Eno Foundation Director; Rudolph Jose of Cook and Stoddard; Chief Justice Walter I. McCoy; Major Raymond W. Pullman, Superintendent of District of Columbia Police; and Justice Siddons of the Supreme Court of the District of Columbia.

Revision of a recommended standardization of traffic rules lasted 6 months and included feedback from traffic authorities throughout the country. Response was unanimously positive, and the project was praised by all major newspapers of New York and Washington. Unfortunately, there was no follow through by the authorities.

In 1920 Senator Dillingham introduced the Eno bill to provide standard general highway regulations for the nation and adequate

special traffic regulations for the District of Columbia. But 3 years later no action had been taken on the measure. The year 1923 turned out to be a period of intense but futile activity on the question of improving traffic conditions in Washington. It was in many respects a repeat of Mr. Eno's experience in New York from 1900-1903.

### **Eno Heads DC Committee**

Assuming a new assignment from the District of Columbia Commission to be chairman of a committee to study Washington's traffic problems and propose changes, Mr. Eno took the first step in January to determine the committee's authority and whether any ordinance changes would have to be made. He made an appointment with Ringgold Hart, the Assistant Corporation Counsel of the Police Court, who was assigned to help him with the legal work.

Hart had lunch with Mr. Eno at the Eno residence, after which they went over the plans and regulations. Hart assured him that everything was in order. Hart was a former Police Department typist who was promoted to the Police Court job after studying law at night.

Mr. Eno explained the purposes at the first committee meeting on January 3. He also furnished each member with a copy of the proposed regulations and plans and a textbook on traffic to acquaint the members with the elements of the work at hand.

### **Committee Jumps Traces**

Public hue and cry over the high rate of street accidents and fatalities had prompted the Committee's duties and given urgency to a solution. Mr. Eno responded by calling the second meeting 3 days later at his home. He expected that the Committee would immediately put into effect general regulations that would reduce the unnecessary loss of life, and would wait until they had a chance to familiarize themselves with the subject before suggesting any changes. Instead, the Committee went over the provisions paragraph by paragraph although the rules had been developed over a period of more than 20 years and proven in actual practice in many cities of the United States and foreign countries.

The Committeemen's nitpicking routine was not completed at that meeting, nor at a session January 9, but at the end of the next meeting, January 18, the Committee appeared satisfied. Everything had been voted on and approved, Mr. Eno reported.

A *Washington Post* news story the next day said that the Committee agreed to all but three items which were held to be of minor importance. All three concerned streetcars being favored over other traffic.

Mr. Eno appeared before the District Commissioners January 30, gave them a copy of the tentative plan and a report detailing exactly what the Committee had done.

The Commissioners set another meeting for February 3, but postponed it until February 7 after Hart made a February 2 request to postpone the meeting so that he could introduce some new matter in the discussion. Mr. Eno's suspicions were aroused because he knew of no change whatsoever.

On February 7 the Commissioners placed before Mr. Eno many pages of criticism of his plan. The criticism was formulated and signed by Ringgold Hart and the engineer of the Public Utilities Commission, the streetcar authority which had often tried to spike the Eno traffic regulations in order to gain special trolley privileges.

Mr. Eno called a meeting of his own Committee, which then reversed its previous support of the Eno plan and voted for Ringgold

Hart to formulate a set of regulations of his own.

### **Chairman Eno Resigns**

Mr. Eno was dejected. "This sort of thing," he said, "has taken place in many of our cities and has led to confusion all over the land on account of differences in traffic regulations.

"During the deliberations of the Committee, lasting 31 days, 11 people lost their lives and 175 were injured on the highways of the District of Columbia. It looks now as though we should have to start all over again before anything can be done."

Then he drafted a letter to Cuno H. Rudolph, Chairman of the District of Columbia Commission, saying, "I am sorry that I could not be of assistance, but I have tried hard and have given up only after convincing myself of the futility of further trial under existing conditions . . . The legal problem here seems to be about the same as it was in New York in 1903 when I succeeded in spite of opposition by Aldermen in getting into operation on October 30 the first set of police traffic regulations in the world."

The breach in the Committee, Mr. Eno felt, had reached irreconcilable proportions. After his resignation he said that Committee members Mr. Cole, an alternate, M.O. Eldridge, William P. Ham, Ringgold Hart, R.C. Klotz, and C.W. Price were against him. Price and Cole represented the Washington Safety Council organized by Mr. Ham. Mr. Eno thought that Chief George S. Watson stood with him, and possibly C.B. Hunt. He did not speculate on stands of other Committee members: A.J. Headley and William P. Hane, but he thought it was "hopeless to try anything with that Committee."

### **Ringgold Hart Takes Charge**

Hart was elected Secretary of the Traffic Committee, but actually assumed the prerogatives and authority of Chairman. He was appointed a committee of one to draft a new traffic code. *The Washington Post* reported on February 14, 1923, that all members of the Committee voted against Eno regulations.

Mr. Eno told *The Washington Daily News*:

*You ask me what happened in relation to the Commissioners' Traffic Committee. Perhaps the following illustration will express the real situation. If you were standing on the deck of a boat and there was a man overboard and there was also a life preserver within ten feet of you, would you throw him the life preserver or would you go off and invent a new life preserver which might suit you better and take 5 weeks to do it? That is what has happened here and what the people will justly complain of.*

### **Eno Is Still Favored**

Although the Committee was against him, Mr. Eno still found favor in the District Commission. President Rudolph thanked him "for all you did and tried to do for this community." He assured Mr. Eno that he "took no part in the traffic situation matter."

The Dupont Circle Citizens Association headed by John Temple Graves, newspaper columnist, gave unqualified endorsement of Eno traffic plans for Washington.

"A number of U.S. Senators," *The Washington Times* editorialized, "have come tardily to the realization that the present traffic conditions in downtown Washington are a source of danger to the citizenry. They demand a customary cureall—a congressional investigation."

Senator L. Heisley Ball, Chairman of the Senate District Commit-

tee, said, "I feel that our committee might be blamed if we do not recommend a remedy which stands ready for adoption and one which has been so widely tried with success (meaning the Eno proposals)?"

Mr. Eno left on December 16, 1923, for a 3-week trip to Bermuda, his first vacation since the summer of 1920. Before leaving, he testified before the Senate subcommittee investigating District of Columbia traffic conditions. He told the Senators that politics kept the District from having better traffic. Officials in local "rings," he said, "must be eliminated if there is to be improvement."

Mr. Eno kept on advising with congressional and District leaders on traffic matters, but took no official role.

### **Eno Receives Wide Support**

Mr. Eno received numerous offers of support from business, political, civic, and financial leaders. A gap in the circle was closed June 12, 1920, when the International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers of America, through Secretary Willard L. Sudenga, wrote Mr. Eno asking him to advise a new committee appointed to reform Washington's traffic system.

"Obsolete regulations and division of direction and management between the Office of the Director of Traffic and the Police Department has made the matter of enforcement and control a disheartening and almost impossible task," said the Sudenga letter. "We know there is friction between the Office of the Director of Traffic and the Police Department, and the public interest cannot be ably served under more than one head and one policy. We have fought for modern traffic laws and regulations and are anxious to see a man 'who knows what it is all about' wield his power toward this end."

Mr. Eno accepted the challenge, but as he was about to leave for Europe and would be gone until autumn, he suggested that the Union call on Professor Charles J. Tilden for assistance. "He is head of the Department of Engineering Mechanics and Strathcona Professor of Transportation at Yale University and has been working with me for 10 years and is fully competent to give correct advice on details, and probably can get to Washington two or three times during the summer."

### **Public Still Dissatisfied**

The public continued to witness protests of the way Washington traffic was handled. "'Stops' and 'don'ts' make motoring misery," commented Washington State's Senator Dill.

*The Washington Daily News* said on June 6, 1929:

*We have approximately 300 regulations nearly all of which we fail to enforce despite the arrest of 200 motorists every day. Tourists say our streets are a madhouse . . . The foremost traffic authority has not been consulted about our local mess. This is ridiculous. The opportunity for use, without expense, of Eno's organization and his fund of information should not be ignored. Doubtless it was too much to expect of human nature for the Traffic Department to seek his aid. The Commissioners should do it. If they will not, Congress should commission him to make a study of traffic in the national capital, to give his views on what should be done about it.*

### **Eno Appears Before Senators**

On September 25, 1929, Senator Daniel O. Hastings, Chairman, telegraphed Mr. Eno that "our own subcommittee (on traffic) of the Senate District Committee would greatly appreciate opportunity hearing your view on improvement Washington traffic conditions."

Mr. Eno was getting ready to sail to Europe, but he testified before the subcommittee on October 5.

He advocated:

1. Eliminate all automatic street signal lights.
2. Traffic plans drawn up by a civil engineer, followed by reorganization of the Traffic Director's office to place it under direct control of the Police Chief.
3. Substitute Council of Defense's simplified Code of Traffic Regulations (which Mr. Eno wrote) in place of "the present cumbersome rules."
4. Transfer crossing officers to the regular Police Department, which are now hired by traction (streetcar) companies.
5. Change rules to permit left-hand turns wherever possible.
6. Build garages for automobiles of federal employees in basements of government buildings.
7. Compel department stores and certain other establishments to unload their trucks in sub-basements.
8. Give vehicles on the left the right-of-way at intersections.
9. Scientific working out of the parking problem by an experienced traffic engineer.

Senator Hastings said his subcommittee would recommend the Eno plan.

Mr. Eno never again became heavily involved in Washington traffic reform, and his records of District of Columbia traffic communications became sparse.

He noted in his Washington scrapbooks in 1930 that vehicle traffic signal lights were being controlled without contact by under-street magnetic detectors.

A 1938 scrapbook entry reported a ban on automobile horn-blowing in Washington between 11 PM and 7 AM.

The final entry in his Washington scrapbooks was dated December 1939. It quoted a taxicab driver who observed that the traffic mess in Washington was so complex that it could not have been caused by accident or dumb planning. "It took a genius," the cabby said, "to tie up Washington traffic so badly."

Washington finally got around to adopting most of the traffic ideas and principles pioneered and advocated by Mr. Eno, but without his further personal presence and guidance.



## CHAPTER 7

# Europe Welcomes World Traffic Authority

Mr. Eno was greeted in Europe with enthusiasm. *The Evening World* ran a picture of “the American who is introducing New York traffic rules in Paris.” The accompanying story said the Prefecture of Police had adopted Mr. Eno’s suggestions for mounted traffic officers. And Eno “Rules of the Road” would be tested in “the most fashionable shopping districts. The women whose automobiles make those streets impassable favor the regulation of traffic because the idea is imported from America.”

“The growing peril to pedestrians in Paris is constantly attracting attention,” said *The New York Times*. *Le Matin* of Paris published an Eno interview criticizing the constant blockage of the busiest streets of the city. *The Public Ledger* in Philadelphia reported that a parliamentary committee was working on “Rules of the Road” for a French network of motor roads.

Mr. Eno returned to the United States for the pre-Christmas rush. And a late December, 1909, issue of *Le Matin* said, under the headline, “Le Systeme Eno,” that Paris was pleased with the new street rules. Plaques, like those in New York, were affixed to lampposts in the opera quarter of Paris to direct drivers as to their route.

When the Seine River overflowed and flooded its valley in January 1910, Mr. Eno was one of the first foreigners to respond to the needs of victims, cabling \$2,000 for their relief.

### Official Jealousies Hinder Program in Paris

History repeated itself in France, aping the Eno New York experience, in an outbreak of press and official jealousies that placed difficulties in the path of street reforms. The Seine inundation also cooled traffic fever.

The chief Eno opponent in France was Monsieur Emile Massard of the newspaper, *Le Matin*, and alderman of a Paris ward. He pressured the Prefect with plans of his own. His newspaper, previously a strong Eno backer, ran letters opposing the Eno system, but not those favoring it. Fortunately, this tack was only a temporary aberration; *Le Matin* again became a strong Eno supporter.

### New Prefect Follows Eno System

Mr. Eno’s book in French, *Le Probleme de la Circulation*, a history of Paris’ troubles in regulating traffic, evidently won converts in high places. The new prefect, Monsieur Hennion, was reported to have started serious

reforms that followed Eno recommendations to the letter. In Paris, cab drivers threatened to strike if Le Systeme Eno was not put into effect. They won.

A French friend of Mr. Eno wrote him that he was introduced at a banquet to the son of Monsieur Massard, the *Le Matin* foe of the Eno program. "I managed to switch conversation to what had been done lately regarding street traffic. The young man appeared elated at what he thought was a good joke. 'My father completely foiled that American. I wonder why a foreigner was allowed to meddle with our affairs . . . but he was done.' "

In a subsequent letter the Paris friend told Mr. Eno: "Don't worry about Massard. He is 'burnt,' as we say here. His paper since the death of Rockefeller has no more influence."

### **Buenos Aires Recommended as Example**

After the success of Le Systeme Eno in Paris, other capitals adopted it. Buenos Aires, Argentina, was among those asking Mr. Eno to work out a traffic plan, and agreed to every suggestion he made. A year or two later, according to *The Rider and Driver*, Mr. Eno was introduced as a traffic regulation authority to a much traveled resident of Washington. The globe-trotter shook hands with him, and then said in a patronizing manner: "If you want to know what's what in a street traffic system, Mr. Eno, you ought to see the way they do the trick in Buenos Aires!" Mr. Eno thanked him for the compliment.

### **Eno Favors British System**

First and most basic of the Eno "Rules of the Road" was the one requiring vehicles to pass oncoming traffic on the right side of the street.

This is what Mr. Eno had advocated in 1900 and what became law in New York City in 1903. While Mr. Eno admired the English left-hand flow of traffic, the United States never adopted the system. With few exceptions, the left-hand traffic system is used by former twentieth century British colonies, while the rest of the world follows the right-hand pattern.

Samuel Taylor, editor of *The Rider and Driver* and Mr. Eno's strongest advocate, suggested to the traffic pioneer that he could draw much attention to his traffic improvement campaign if he promoted a switch from right- to left-hand driving.

As if in response to the proposal, Mr. Eno wrote in his London-Paris monograph of 1910 regarding traffic going to the left instead of to the right: "I have never so far advocated this because I knew how much comment it would excite, perhaps much of it unfavorable." Nevertheless, he added:

*There is no doubt that the left is much to be preferred to the right, and for these reasons among others: A driver, sitting as is usual on the right, can measure more accurately his distance from a vehicle going in the opposite direction; the footman is on the side nearest the sidewalk and does not have to go around the vehicle to get up or down; the proper side for a man accompanied by a lady, in an open vehicle driven by a coachman, is the left and as the lady is supposed to take her seat first, the man must step across her to reach his place. The matter of the proper side to sit is of course only one of etiquette, but it is an old and well-established custom of polite society.*

Mr. Eno was evidently giving first priority of thought to his first love—horsemanship, but the automobile was not to be ignored.





*Mr. Eno favored the English custom of driving to the left side of the road, and he felt that London's traffic control was among the best in the world.*

He continued:

*It might be asked why not have the driver on the left? It has been tried but is extremely awkward because the whip hand in driving horses is the right and if you sit on the left the whip sticks out too far on the left, and in driving a motor the levers must be put on the left side and used by the left hand or in the center of the vehicle where they are very much in the way.*

*Any one who has driven in countries where the left-hand rule is the custom knows how easy it is to adapt oneself to it and how much safer and better in every way it seems in a very short time.*

Buggy and carriage drivers sat on the right side where right-handed drivers could wield their whips away from the travel lanes. Also, bearing to the right enabled a driver to keep an eye on the dirt bank, ditch or other roadside hazard on his near side in passing.

### **Why Englishmen Drive on the Left**

*The Rider and Driver* noted that signs in London said, "Keep near left-hand kerb," while Eno signs in America read, "Slow moving vehicles keep near right-hand curb."

In less peaceful times, *The Rider and Driver* explained, nearly every Englishman carried a sword or a cudgel. A pedestrian presented his left side to an approaching stranger, giving himself the best opportunity of warding off attack with his left arm or shield, while enabling him to attack with his right. The English still followed the custom of walking on the right.

But on horseback the ancient Englishman preferred to have his sword arm (right) toward the person approaching and therefore passed on the left. The left-hand custom carried over to driving horse-drawn vehicles, and eventually to automobiles.

A bit of old British verse commented on the inconsistency of the nation's customs of walking or riding and driving.

*The rule of the road is a paradox quite,  
Both in riding and driving along.  
If you go to the left you are sure to go right,  
If you go to the right you are wrong.*

*But in walking the streets 'tis a different case,  
To the right it is right that you bear;  
To the left should be left quite enough of free space  
For the persons you chance to meet there.*

### **Pope Proclaims Driving on the Left**

When Pope Boniface VIII proclaimed the first Christian Jubilee Year of 1300 A.D., he directed that all pilgrims to Rome keep on the left side of the road. This edict had something of the force of European law for over 500 years. At the time of the French Revolution, anti-Catholic Robespierre and his Jacobins resented the old papal directive and prevailed on Parisians to drive on the right. Napoleon ordered his military traffic to keep on the right. Civilians in France and countries conquered by Napoleon followed suit.

Writing in his 1910 pamphlet on rules and customs observed in London and Paris the previous Fall, Mr. Eno recognized the near-impossibility of converting U.S. drivers to driving on the left side of roadways. "New York traffic regulation was started," he wrote, "with the idea of enforcing the London practice, but that was found impossible to do as the drivers knew no regulation except that of keeping right when they met another vehicle."

A marketing miracle that began in 1908 reinforced the practice of driving on the right side of roads. Henry Ford, after two unsuccessful attempts, came out with his economical, mass-produced, assembly-line Model T, a car that outsold all American automobiles built until 1924. Ford not only designed a car that was in the purchasing range of the average American family, but for the first of his automobiles it had the steering wheel on the left-hand side, the most practical place for right-hand driving. Other automobile manufacturers followed the example and an American reversion to the English left-hand system never received much support.

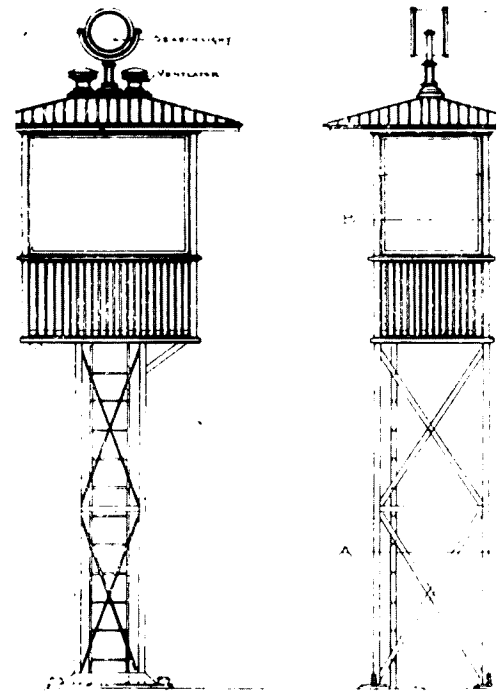
### **Eno Faces Continued Opposition in Paris**

From his Washington base Mr. Eno busied himself with traffic plans for the nation's capital, whose example he hoped would be followed in all states of the Union. He also made frequent trips to New York to maintain and enhance the improvements he had started there since 1903. And through correspondence and annual visits he was introducing Eno traffic plans in Europe, with major attention to France.

He had some spectacular successes. For example, a Paris cabmen's union liked his work so much that in 1910 the organization designated him an honorary member of the *Chambre de Voitures de Place de las Seine*. The French capital adopted one-way streets, employed mounted traffic police, and adapted the Eno rotary system for the famous Arc de Triomphe.

But because of political jealousies and some resentment against reliance on foreigners, Mr. Eno encountered difficulties. The principal opponent of his program, Monsieur Massard, was an alderman of a Paris ward. He pressured the Prefect to accept his own traffic plans. His newspaper, *Le Matin*, besides being editorially critical, published letters to the editor from readers opposed to the Eno plans, but not from readers favoring them.

As a counselor of the Paris municipal government, M. Massard



*Streetcars, trucks and heavy traffic often made it difficult for the police officer directing traffic to see and to be seen. The advent of traffic towers removed the policeman from the street and placed him in an elevated booth where he could see above the traffic and signal instructions for traffic. These are sketches of two traffic tower concepts of William P. Eno.*

published an official brochure in 1910 in an attempt to discredit Mr. Eno's work in behalf of traffic reform. "One of our compatriots, who has just come back from there (the United States), paints a less than delightful picture of the traffic there," he wrote. "We reprint it with pleasure because it consoles us about what we see."

The "compatriot" spoke "in favor of Paris" after visiting Chicago, Denver, Duluth, New York, St. Louis and San Francisco. He was quoted as saying policemen were few on the jammed streets of New York. Further:

*In Paris, at least, one does not have to shoot a revolver at the tires of cars to force them to stop. The police are not forced to rope off the exit of the Bois de Boulogne to stop drivers going at 50 miles per hour. But that happens regularly at Central Park, where you can see at the exits of Seventh and Fifth avenues, a cable attached to a tree to block the way. Then the police stand calmly by while a car crashes into the cable.*

The "compatriot" cited New York potholes, filthy streets, "sticky boards in the guise of bridges," and ventilation shafts sprinkling debris on passersby. "Where is the wonderful order of the American, Eno? I wonder?"

The tirade continued: "In New York, no fence is put around work sites and, day and night, you will hear the deafening noise of the electric and steam-run machines. In Paris, people don't leave horses dead from mid-summer heat for days at street corners where they obstruct traffic. If a fire breaks out, traffic is not interrupted . . . If the Paris police were as brutal as those of New York, Chicago, etc., there would be a riot a day."

Having concluded the quotation of the unidentified "compatriot," M. Massard commented bitterly: "So let us be consoled. And let's wonder if Mr. Eno would not do well to re-establish order in his good city of New York. Since we are writing of Mr. Eno, let us say, once and for all, that there is no system peculiar to Mr. Eno. You will become persuaded of this by reading this piece."

#### **Author Eno Says It in French**

Mr. Eno became aware that he would never be able to convert Parisian authorities from their chaotic street conditions to an orderly traffic process unless he spoke to them in their own language. So he began writing a book on the history of Paris street problems and suggesting proven methods of correcting them.

He had just started the project when his wife of 28 years, Alice Rathbone Eno, died on December 21, 1911. After her death, Mr. Eno applied himself assiduously to completing the book, which was titled *Le Probleme de la Circulation*. He sent the manuscript to his Paris literary connection, William H. Dumont, for translation into French. The book was published in 1912 and 10,300 copies were distributed among Paris police and other officials concerned with traffic.

Favorable reaction was immediate and sustained. The new Paris Prefect, Monsieur Hennion, started serious reforms that followed Eno recommendations to the letter, including the adoption of New York regulations in 1912.

Some time later, Mr. Eno had just returned to Washington from France when he was notified that Paris cabmen were threatening to strike if certain Eno suggestions were not adopted. Mr. Eno cabled the cabmen and requested that they take no action until his return to Paris. The cabmen obeyed, but their protest was respected and their case was won without further threat of a walkout.



*Alice Rathbone, William Phelps Eno's first wife.*

Le Systeme Eno, as the French press heralded the American's proposals, became famous in the transportation circles of North and South America, Europe and parts of Asia as cities in the United States and abroad joined the growing list of Eno traffic adherents.

### **Paris Traffic Tower Sparks Eno's Enthusiasm**

After World War I a new vogue in traffic control had its beginnings in the United States. Traffic control towers began rising in major cities of the world. It was not Eno's New York, however, that led the way with towers despite the widely accepted legend.

In 1912, an ornate bronze kiosk 15 feet high had been erected in Paris at the Rue Montmartre and Grande Boulevard. A policewoman sat in a sort of glass showcase near its top and manipulated a revolving four-sided metal box that protruded above the kiosk. Opposite sides of the box were painted red and white respectively for "stop" and "go."

The spectacle amused the Parisian taxi drivers, who joyfully ignored the signals while onlookers cheered. The kiosk was abandoned after 22 days of use.

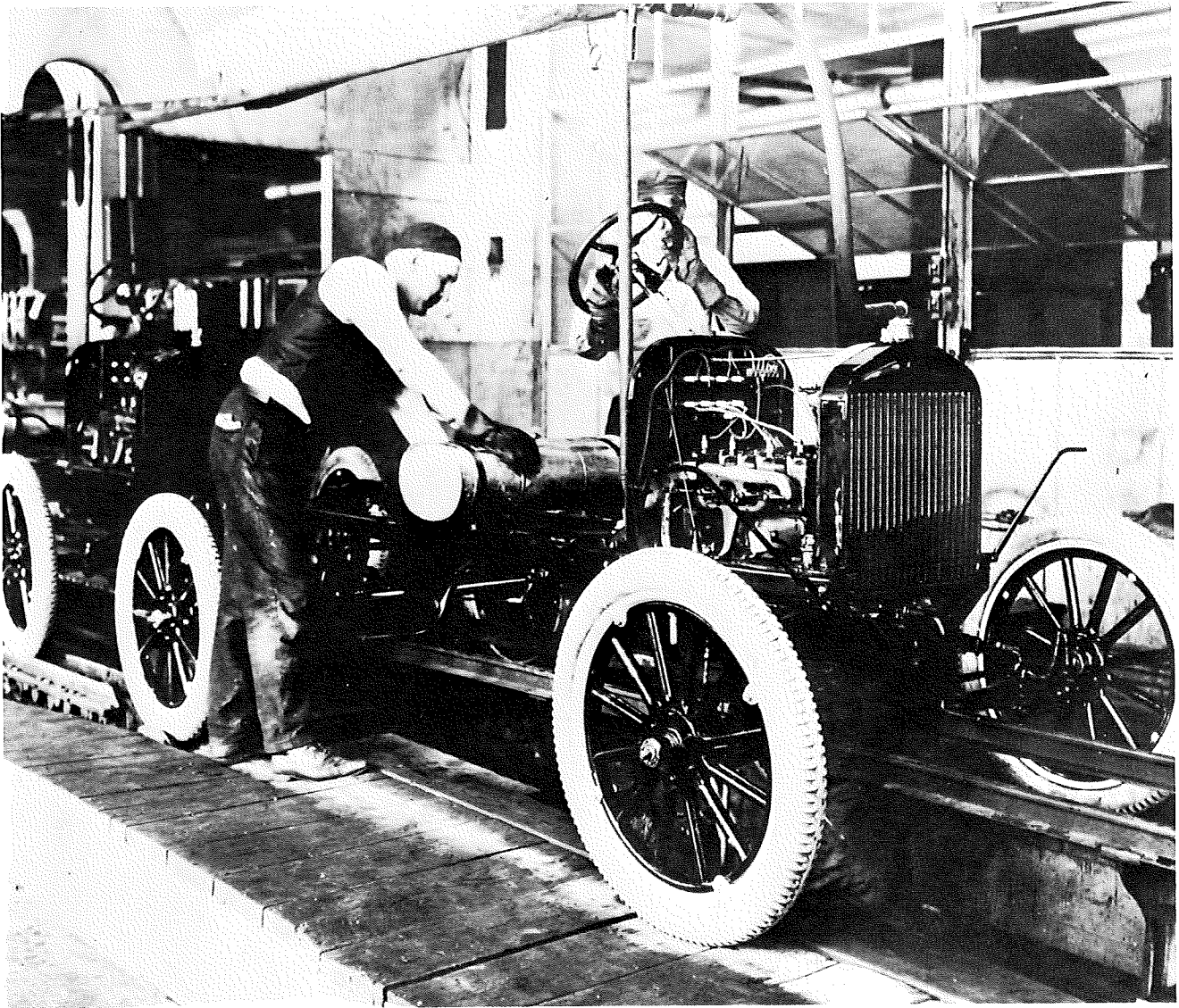
The Paris tower had been observed by Eno on one of his frequent trips abroad. He referred to it 2 years later in a letter to the editor of *The Rider and Driver*, published in the July 1914 issue. Believing the problem to be one of design rather than principle, he suggested a sort of crow's nest raised on a column high enough to clear the heads of pedestrians and placed on a central isle of safety, for instance, at Fifth Avenue and Fifty-seventh Street.

"In the raised covered sentry box, or crow's nest, the traffic policeman would have a clear view of traffic in all directions, be moderately well protected from the weather, and able to do much more effective duty than when at street level," Eno wrote. Over the crow's nest he envisioned two pairs of semaphores worked by electric buttons and with red lights at the end of the arms at night. He encouraged the installation of telephone equipment between headquarters, the nearest police station and the crow's nests. "But, as the use of the telephone would mean interference with traffic duty," he wrote, "there should also be communication to the other crow's nests by means of a series of electric buttons, each one meaning a certain signal as, for instance, 'clear the avenue for fire engine' or 'look out for runaway,' etc . . ."

The first traffic tower in the United States was set up in 1917, at Detroit's Woodward and Michigan avenues. This was then one of the nation's busiest intersections, used by some 20,000 vehicles daily. The tower was an Eno-type crow's nest, its steel superstructure supported on a concrete base. Red and green kerosene lanterns were used on the semaphore arms at night.

### **Uniform Laws in States Are Eno Aim**

Meanwhile, U.S. authorities showed increasing interest in uniform regulation that would permit free interstate travel qualified by licenses issued by the individual states. Automobiles reached a numerical 50 percent ratio of mid-New York City traffic. Congress authorized the Commissioners of the District of Columbia to regulate Washington street traffic. Mr. Eno was appointed chairman of the Committee on Good Roads and Automobile Regulation of the District of Columbia National Civic Federation. *The New York Sun* published a full-page article under the headline, "American Solves Traffic Problems in Paris." Mr. Eno's pamphlet "Fast and Slow Traffic" was published in English, French and German for the 1913 International Association of Road Congresses in London. A New Orleans newspa-



*Model T Ford assembly line technique assured growth in automobile popularity by providing vehicles affordable to the masses.*

(Source: Library of Congress)

per reported on “the universal verdict of success” of a “scientific doctor of traffic problems, Mr. William Phelps Eno, who is so well known to social New Orleans,” native home of his late wife.



## CHAPTER 8

# Eno Helped Win World War I

World War I began in July 1914, but in March of that year Washington had other things on its mind. The Riding and Hunt Club closed its season with an exhibition in the Capital, and the three awards in the saddle class went to Eno-owned horses ridden by Prof. A. Burkhardt (Dawn), first; Jack Graham (Diomed), second; and 56-year-old William Phelps Eno (Aurora), third. "The galleries were thronged with the social elite of the Capital," said a newspaper report.

In late June 1914 Mr. Eno received a letter from *Der Strassenbau Journal* in Halle, Germany, asking for permission to publish his report made to the Third International Road Congress.

Even in 1916, Mr. Eno received long letters from Paris officials concerned with traffic, but having no mention of the war. His "Rules of the Road," however, played a pivotal role as the official military traffic system adopted by the Western Allies.

A significant event in American travel took place on July 11, 1916, when President Woodrow Wilson signed the Federal-Aid Road Act initiating the planned interconnection of highways across state borders. The measure provided \$5 million for use by states that undertook road building programs and established a system of highway classification. At that time almost 250,000 commercial vehicles and more than 3,000,000 private automobiles were registered to use the U.S. public roads.

During this period Mr. Eno was engaged in writing letters, pamphlets, and articles for publications, making speeches for organizations interested in traffic, giving assistance to the growing number of cities seeking his advice on street reforms, and accepting awards and honors in recognition of his leadership in traffic regulation. Traffic control assumed increasing impetus in 1916 as American war preparations multiplied street congestion. On April 3, 1917, the United States, angered by the German sinking of American ships under a policy of unrestricted submarine warfare, declared war on Germany.

### Washington's Home Defense League

A month later, Mr. Eno was appointed to raise and command the Home Defense League for the District of Columbia. The organization was partially an auxiliary police department and partially composed of riflemen. Both forces were kept ready in case of any emergency in the District, essentially to replace the regular police if they were called away for special duty.

To facilitate the work of the League, Mr. Eno wrote a manual, *Home Defense League for the District of Columbia*, which was in demand in other cities forming similar organizations to prevent accidents, trouble and

crime. As director in Washington, Mr. Eno headed a volunteer corps that included two deputy directors, a secretary-treasurer, police captains in 11 precincts, and divisions for guards, constables, riflemen, motorcars, motorboats, and a medical board. The manual served as a guide for instituting home front units in future emergency situations.

Mr. Eno sent a copy of his Home Defense manual to Woodrow Wilson and received this acknowledgement dated August 7, 1917, from the President's wife, Edith Bolling Wilson:

*My Dear Mr. Eno,*

*Ever since Dr. Grayson brought the little Home Defense League book with its button, card, etc., to the President, he has hoped for a moment in which to send you a personal line of appreciation, but his desk is so "paved" with such good intentions that I have asked the privilege of writing to you.*

*He asks me to say that he especially values the generous words from the Director of the Home Defense League and that he is happy to be associated with so fine an organization and sends his sincere regards.*

*I am happy to see from the photograph you enclosed, that the cameraman treated you more generously than he did us—it is trying to be such victims, but in a good cause we must face even the photographer.*

Writing a generation later, Mr. Eno described the Home Defense League as a group of 5,000 men, about half of which were rifle units. They had no uniforms; identification was limited to a shield which went into the buttonhole of the coat, and an armband with an insignia, which was to be used only when on duty. "These saved the expense of uniforms and, in some ways, were better because the work of the League was done in secret. The only weapon we had was a hickory walking stick, furnished to each member, although revolvers were ready to be issued at any time," Mr. Eno commented.

Traffic, of course, was a very significant aspect of Home Defense League duties, engaging Mr. Eno in his favorite pursuit. In addition, he served on the War Industries Board with particular attention to assisting war workers going to and from their work places. A month after the Armistice of November 11, 1918, he was appointed an expert in the Council of National Defense at a salary of \$1 per annum.

### **Le Systeme Eno's Feat at Verdun**

In October 1918 when the Allies' victory over the Central Powers was in sight, *The New France* paid tribute to Le Systeme Eno as one of the major factors of success at Verdun, the symbol of French courage and resistance. German armies swept over fortifications in Belgium and France, aiming at Paris. But they were stopped at Verdun, the turning point of World War I. The Germans expected only a 10,000-man opposition there, but the French, using the Eno traffic regulations, had massed 60,000 soldiers at the front position.

"One of the numerous reasons that allowed us to win the Battle of Verdun," said *The New France*, "was the somewhat tardy, but absolute, application of a system of circulation whose creator was an American, Mr. William Phelps Eno."

The newspaper report continued, "The public does not dream of the extraordinary effort, the unimaginable method and the genius of organization that are necessitated by the movement of troops, ambulances, ammunition camions (trucks), trains and supplies of all kinds—half going to the front and half returning."





*The first traffic tower or "crow's nest," as Eno had termed it, was the one installed at Woodward and Michigan Avenues in Detroit. It had a steel super-structure supported on a concrete base. The officer, stationed in the crow's nest about 6 feet off the street, operated the semaphore arms then in vogue. This displayed a "stop" and "go" message and used red and green lights at night.*

(Source: ITE History of Traffic Control Devices)

A war correspondent, who was at the Battle of Verdun, wrote the following description of the marvels of transportation for the French journal, *L'Evenmont* of October 3, 1916:

*One is astonished at the facility with which the intense and uninterrupted traffic is maintained on the roads. The long and interminable automobile convoys are left behind by one swift ambulance, mounted men have their special pathway alongside of the main road, and at the crossroads the traditional sergeant and his white stick, so beloved by the boulevardier.*

*The horse-drawn supply wagons have their special roads reserved exclusively for them, to the great joy of the drivers of horses and the impatient motorists. There is a sense of obligation, a rigid regulation of traffic, a code of the road, a veritable 'Systeme Eno' intelligently carried out.*

### Cities With Worst Traffic

With his war duties behind him, Mr. Eno returned to his frustrating campaign to make Washington, D.C., a model of street traffic regulation. The layout of the city, he said, was the best for traffic in the United States, but under the immediate postwar conditions Washington was the worst as far as vehicular movement was concerned. *The Washington Herald* quoted him as saying that "the worst traffic mess in the world is here . . . Washington is suffering from a chronic attack of trafficitis of long standing, due largely to official unwillingness to profit by experience."

He could have gotten some argument from his own nephew, Governor Gifford Pinchot of Pennsylvania, who would have given the booby prize to Philadelphia. In a letter asking his Uncle Will to tackle traffic problems in the City of Brotherly Love, the Governor said, "Philadelphia is one of the worst cities I was ever in so far as traffic regulation is concerned. You might say there isn't any except a mere pretense. One-way streets are not marked, regulations are not observed, and in many other ways the thing is sloppy and loose."

Mr. Eno replied that his hands were too full for him to go to Philadelphia immediately, but he would go later if invited.

"Philadelphia, like most other cities," he wrote, "has been trying to regulate a mob instead of control a trained army." The remedies he recommended were rule simplification, education of the public, and training of enforcement authorities, solutions which had proved successful in New York.

Referring to conditions in Washington, Mr. Eno declared, "They are worse than in any other place in America, so far as I know, and it is absolutely the fault of the Police Department or the boss commissioner. They are responsible for those lives lost just as though they shot the people. They are killing more than twice as many people here, in proportion to the population, as they are in New York. There is no reason for it except pig-headedness and stupidity."

### Paris Backslides Into Traffic Chaos

Paris, once a model of traffic regulation for other capitals in the world, moved away from the Eno discipline after the war and slipped back to its former chaotic street climate. The newspapers of the City of Light began to cry out in 1919 for return to observance of Eno rules.

"Who will vigorously bring back or resuscitate the Eno System?" an Emile-signed article in *Excelsior* of Paris asked. "Who will infuse this subtle science into those persons, asleep or reckless, to whom, every day, we confide our fragile destinies?"

Pointing to the confusion that existed before Mr. Eno rescued Paris from its pandemonium, *Le Temps* posed the question, "Are we going to again see this? It seems since 1914 we ought to have learned something, if it was only Verdun where it was an automobile traffic expert who won the game. Where is that genius? Let him come in haste! Paris will soon die of congestion! When we have realized it, it will be too late!"

"This excellent (Eno) system was abandoned during the war," said *France Libre*. "It is urgently necessary to come back to it!"

### **Brighter News Follows the Teens**

There was brighter news on the traffic front in 1920, the year that Mr. Eno published his third book, *The Science of Highway Traffic Regulation*. New York's Fifth Avenue solved overloading problems by conversion into a one-way street. Detroit, which pioneered the building of Eno-designed signal towers for principal intersections in 1917, now had six crow's nests in operation. (Detroit's traffic regulation was considered among the best in the nation.) And Mr. Eno was getting encouraging support for a national uniform system of traffic regulation. Here is what he was told in a letter from F.L. Siddons, Chief Justice of the Supreme Court of the District of Columbia:

*The motor-driven vehicle has become an enormous factor in interstate commerce, and the frontier lines between States of the Union are becoming more and more vague and shadowy as the automobile tends to obliterate them. It is not too much to say that a sound body of General Highway Traffic Regulations, if adopted, will greatly aid in the unification of the people of the Country, promote commerce and diminish the tragedies directly due to improper regulations or none at all.*

Prophetic!

An important 1920 development that greatly affected Mr. Eno's future actions was an inherently non-traffic event. On January 16 national prohibition of the sale and manufacture of alcoholic beverages by the Eighteenth Amendment of the U.S. Constitution went into effect. Mr. Eno became an avid opponent of the unpopular law and fought against it with the same tenacity and perseverance that marked his campaigns in favor of highway and street discipline.



*“Philadelphia, like most other cities,” Mr. Eno wrote, “has been trying to regulate a mob instead of control a trained army.” The remedies he recommended were rule simplification, education of the public, and training of enforcement authorities, solutions that had proved successful in New York.*

*(Source: ITE History of Traffic Control Devices)*



## CHAPTER 9

# Eno Establishes Foundation

Without preliminary fanfare, William Phelps Eno created a corporation in 1921 to continue and perpetuate his lifetime's work in the promotion of safety and discipline on streets and highways. Its name, to be twice changed later to reflect broadening fields of interest and service, was "The Eno Foundation for Highway Traffic Regulation, Inc." It was headquartered in Mr. Eno's country home, "Judah Rock," on the shore of Long Island Sound in Westport, Connecticut, some 40 miles north of New York City.

### Outline of Purposes of Organization

Purposes of the Foundation, as spelled out in the Articles of Association, April 21, 1921, were to investigate and study regulations relating to all kinds of traffic, promote the safety and facility of the public, and to do, promote or assist in the following:

1. Devise traffic methods and rules;
2. Publish information on traffic;
3. Standardize general highway traffic regulations;
4. Familiarize the public with traffic laws;
5. Promote special traffic regulations;
6. Provide proper instruction of traffic police;
7. Promote proper understanding by all police that they have general traffic obligations when in uniform;
8. Furnish advice on traffic regulation generally;
9. Recommend physical changes, such as widening of roadbeds, to assist the movement of traffic.

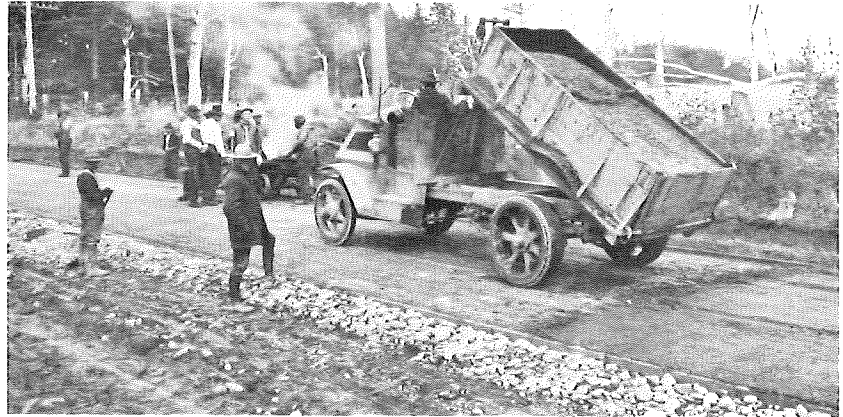
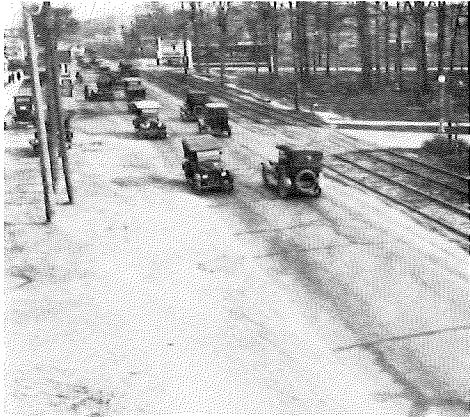
Other purposes of the eleemosynary institution organized without capital stock were to own real and personal property, establish educational endowments, and employ engineers, technical experts and others.

### Eno, Bartlett and Ely Elected

Incorporators besides Mr. Eno were Philip Golden Bartlett and David Jay Ely of the law firm of Simpson, Thacher and Bartlett of New York City, which handled the Eno family's legal affairs.

Members of the corporation were to be elected by a majority vote of the members or directors, and provision was made for an honorary advisory council. Annual meetings were to be held in October.

Legal requirements were observed at the meeting of incorporators October 15, 1921, at Mr. Eno's Saugatuck residence. Mr. Eno was elected Chairman of the Board of Directors; Bartlett, President; and Ely, Secretary and Treasurer.



*close to the intersection and people should be obliged to cross a little back of it.*

If this advice seems elementary, it must be remembered that in the early 1920s some rural roads in America, being paved for the first time, were not banked on curves at all.

### **Foundation's First Annual Meeting**

The first annual meeting of the Eno Foundation was held at Mr. Eno's Saugatuck home on October 10, 1922. Two new directors, Major Charles A. Benton and Dr. W. Kendrick Hatt of New York, were elected to 3-year terms on the Board, along with Directors Hawes, Kelsey, Platt and Sprague. Directors Cooke, Johnson, Lewis and Schley were elected to serve 1-year terms.

In order that the Foundation might maintain as many members on the Board as possible, the bylaws were amended to empower the Board to transfer any Director to the Honorary Advisory Council (or Board, as it became officially known).

### **The Foundation Begins to Function**

The Foundation began to make an impact beyond the personal achievements of Chairman Eno.

Under the auspices of the National Research Council, the Foundation was accepted into membership on the Advisory Board for Highway Research. And the Highway Education Board asked the Eno Foundation, as a continuation of the work of the former Council of National Defense, to investigate, codify, standardize and publish general highway traffic regulations, "thus insuring continuity and permanency in the study of these important problems"

As Foundation Chairman, Mr. Eno was appointed by Dr. John J. Tigert, Commissioner of Education in the Department of the Interior, to be chairman of a committee to judge two national safety contests, one for essays by grammar school pupils and the other for lessons by grammar school teachers.

A total of 450,000 essays and lessons were submitted nationwide. When the winning teacher, Mrs. Anne Rogers of Sterling, Colorado, came to Washington to receive her reward, Mr. Eno entertained her at lunch at his Washington home and introduced her to President Warren G. Harding. Runners-up in the lesson contest were Miss Teresa Lenney of New Rochelle, New York, and Miss Ida G. Ale, Trenton, New Jersey.

The Eno Foundation held its second annual meeting October 9, 1923, at the Chairman's home at Saugatuck and elected two new Directors, William J. Cox of the National Bureau of Casualty and

*This is a 1920's photo (left) of first Portland cement concrete street, Woodward Avenue, Wayne County, Michigan, laid in 1908. The motor vehicle created roadbuilding problems, but it also helped solve some. With a power truck, gravel could be hauled, three tons at a time, for a 38-mile distance — a job that could not have been done with four or five animal teams in the same time. The dump truck had originated in 1905 and was used increasingly after World War I. By 1902, the base of support for better roads had widened well beyond the interests of the League of American Wheelmen, who were the earliest organized group of advocates for better roads. The leadership of the Wheelmen was instrumental in the organization of the American Road Makers in 1902. Today, this organization is known as the American Road and Transportation Builders' Association.*

Surety Underwriters, Baltimore, and Stephen James of the Highway Education Board in Washington, D.C.

### **Famous Woman Joins Board of Directors**

At a special meeting of the Eno Board 2 months later, the Directors elected their first woman member, Sophie Irene Loeb of New York.

“Miss Loeb,” Mr. Eno said in his announcement, “has given great assistance in traffic, notably in control of the taxicab end of it. It is due to her more than anybody else that a reform in the taxicab service was effected, beginning in 1913. She is now president of the Child Welfare Board of New York City.” (Mr. Eno assisted in her cab reform campaign, including writing a 1912 pamphlet on *Public Carriage Service and Automobile Licensing*.)

A former newspaper police reporter for the *New York Evening World*, Miss Loeb centered her interest on destitute children, better tenements, cleaning up slums, providing school lunches and public playgrounds, protecting poor tenants, and a score of other matters of community welfare. She settled the New York taxicab strike in 1917.

She successfully sought welfare legislation for widowed mothers in most states. In her 7 years as president of the New York Child Welfare Board, appropriations grew from \$100,000 to \$5,000,000. She was a speaker at the First International Congress of Child Welfare in Geneva, Switzerland, and as president of the Child Welfare Committee of America, she received a special invitation to be an adviser to the League of Nations in its welfare work.

After her death on January 20, 1929, Mr. Eno dedicated to her memory his book, *Simplification of Highway Traffic*, published that year.

### **Traffic Courses in U.S. Universities**

Mr. Eno noted in his 1924 diary that George Washington was the sixth American university to install traffic courses in its curriculum. The others were: Maryland, Michigan, Purdue, Worcester School of Technology, and Yale. Mr. Eno sponsored cash prizes for student essay contests on traffic in these institutions to promote interest in the subject among the colleges.

The Eno Foundation held a special meeting in New York on April 25, 1924, and elected Lew R. Palmer as the fifteenth member of the Board of Directors. He was the First Vice President of the National Safety Council for Industrial Safety in Chicago, Illinois.

### **Paris Traffic Recovers From World War**

When Mr. Eno went to Paris in June 1924 for a 2-month European visit he was roundly welcomed by the press with numerous stories and complimentary headlines acknowledging his influence on improving French traffic.

Under the headline, “Le Systeme Eno,” *The Paris Times* reported:

*Every 3 years on average, this tall, benign figure walks across the screen of the Parisian shadow show . . . It is the author of Le Systeme Eno, the philanthropic angel of the Eno Foundation for Highway Traffic Regulation, Inc., and the apostle of one-way streets. At the Paris Prefecture of Police, the shadow of the American traffic master has fallen many times across the threshold of the Prefect's inner sanctum, and its last appearance a few days ago was greeted, as of old, with a genial welcome.*





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*Although the Detroit traffic towers were "first," those in New York City received more publicity. Pictured here is one of the bronze traffic towers used on Fifth Avenue, New York City in the 1920s.*



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*Mr. Eno credited the good operation of London traffic to the well-trained police and the respect for fair play of the average citizen. London traffic police wore white-sleeved uniforms so that hand and arm signals would be more visible to vehicle drivers. Paris traffic policemen wore white gloves.*



Mr. Eno's summer trip to Europe took him first to London where he found traffic "going in the same old-fashioned way," thanks to "the well-trained police and the respect for fair play of the average citizen." He said London's safety islands were the best in the world. He visited Arthur Bassom, superintendent in charge of traffic, Scotland Yard, and Sir William Horwood, Commissioner of Police. The New Scotland Yard adopted Mr. Eno's recommendation that one-way traffic be installed on narrow London streets.

In Paris he called on Monsieur Naudin, Prefect de Police. "It was a great satisfaction to me," Mr. Eno said later, "to find traffic in Paris again back to where it was in 1913. The traffic police are improving very much. The drivers are better perhaps than in any other city in the world, having passed rigid examinations before being permitted to drive."

### **A Warm Welcome Abroad and at Home**

Mr. Eno's welcome abroad and demands in the United States for his interviews, speeches and leadership were in sharp contrast to his official rebuffs nearly a quarter of a century before. In his first effort at the turn of the century to interest New York aldermen in traffic regulation, their concern was only what he expected to get out of it. When he asked the Police Commissioner in February 1902 for an appointment, the reply was: "With regard to a conference, it does not seem to me that such is necessary or desirable inasmuch as the duties of this department do not comprise the framing of laws or ordinances, but rather the enforcement of the law. Unless it should appear that such a conference is desirable, I must ask you to excuse me."

The succeeding Commissioner seemed enthusiastic in an initial meeting with Mr. Eno, but after that he refused to talk further, breaking all appointments without explanation. A turnabout came when Gen. Francis Greene became Police Commissioner in 1903 and not only supported Mr. Eno's efforts, but put his signature on the Eno ordinance proposal.

### **Foundation Approves Honorary Advisory Board**

Back at his home at Saugatuck after his 1924 trip to Europe, Mr. Eno was Chairman of the third annual meeting of the Eno Foundation (October 14), which reelected six directors whose terms were expiring. They were: Cox, James, Johnson, Loeb, Palmer and Schley.

The Directors adopted a resolution to create an Honorary Advisory Board with a limit of 63 members. It was stipulated "that all members of the Board of Directors shall be ex-officio members and that each member of the Board of Directors when his term expires shall continue to be a member of said advisory board and that from time to time members whose experience might be useful to call upon be added at any regular meeting of the Board of Directors."

### **Foundation's Eno Gifts Ratified**

Directors Ely, Kelsey and Schley, with proxies, constituted a quorum for a special meeting of the Foundation Board at Ely's New York office March 18, 1925. With Kelsey acting as Chairman, the Board ratified a contract for \$100,216.67 received from Mr. Eno on February 19.

On motion of Ely, the Board appointed Directors Bartlett, Eno, Kelsey and Schley to manage further gifts and general disposal of the organization's funds.

At the fourth annual meeting of the Eno Foundation at Saugatuck on October 23, 1925, Professor Winthrop M. Daniels of Yale University, Dean H.J. Hughes of Harvard University's Engineering School,



and T.T. McCrosky of Saugatuck were elected members of the Board of Directors. McCrosky, who was only 23 years old and an instructor at Yale in engineering mechanics and strength of materials, also became an engineering associate of the Eno Foundation in 1925. The varied career that lay ahead of him included engineer for the city of Peking, China; Planning Director of Yonkers, New York; Executive Director of the Chicago Planning and Greater Boston Development Commissions, and a visiting lecturer at many universities.

Directors elected for 1-year terms at the 1925 annual Eno meeting were: Daniels, Hughes, James, Johnson, Loeb and Palmer; for 3-year terms: Benton, Hawes, Kelsey, McCrosky, Platt, Schley and Sprague.

### **Eno Becomes Chevalier in French Legion**

On December 9, 1925, Mr. Eno was honored at a ceremony at the French Embassy in Washington when he was presented with the cross of the Legion of Honor. The award, which made him a Chevalier in the French Legion, was conferred by France's Ambassador to the United States, M. Daeschner. The decoration was in recognition of Mr. Eno's work in helping to solve the traffic problems of Paris.

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*During the early years of the Eno Foundation, meetings of its board members were often held in these rooms of Mr. Eno's Saugatuck, Connecticut home.*

# CHAPTER 10

## First Decade of Foundation

Mr. Eno wrote in the introduction of his 1926 book, *Fundamentals of Highway Traffic Regulation*, that the Eno Foundation had filled its complement of 21 directors.

Seven were appointed to control the finances. They were Bartlett, Ely, Hawes, Kelsey, Platt, Schley, and Sprague.

The remaining 14 were named to control practical and technical activities. The Directors were: Benton, Blanchard, Chapin, Daniels, Hughes, Inches, James, Johnson, Loeb, MacDonald, McCrosky, Palmer, Tilden and Eno who, as Chairman of the Board, served in both financial and technical capacities.

### **Piccadilly Circus Adopts Eno Plan**

Mr. Eno sailed for Paris on April 24, 1926, and spent most of the summer there, staying at The Ritz and recuperating from an illness and operation.

London paid him a compliment on July 26 when it adopted the Eno gyratory system for the city's famous Piccadilly Circus. When Sir Henry Maybury, Consulting Engineer of the City's Ministry of Transport, notified him about the initiation of the one-way circular traffic movement he called it "the roundabout."

Mr. Eno returned from Europe in late July. Pictures of him on the French line ship show him in typical dress, impeccably groomed; tall and slender with neatly combed short gray hair, blue eyes, gray mustache and Vandyke beard; wearing a starched white collar with four-in-hand necktie, a dark three-piece suit with a gold button in his lapel, a silk handkerchief in his breast pocket, a gold watch chain across his vest, and shining black shoes. Outdoors he wore a derby.

### **Foundation Broadens Horizon**

On September 30, 1926, in anticipation of the fifth annual meeting of the Foundation 2 weeks later, Mr. Eno wrote to the Directors about expanding the scope of the organization. Referring to an amendment to the Certificate of Incorporation, he said: "You are authorized in case, in the opinion of a majority of you, the specified purposes no longer demand the use of all its income available therefor, to apply the same to other purposes deemed of general usefulness to the public."

His suggestions of other uses were: instruction in architecture, including landscape architecture and interior decoration; meetings for the discussion of any laws or regulations which are deemed to be not in the best interests of our country or unnecessarily oppressive in any way or contrary to a spirit of toleration; encouragement of riding in general, especially equitation and the training of saddle horses under the most scientific methods.

Mr. Eno had long-standing interest in all these subjects: architecture, his original choice of a vocation; bitter opposition to national prohibition laws; and the recreational and competitive art of horse-back riding.

"If still other suggestions occur to me later," he said in closing, "I will embody them in a subsequent letter."

### **Expenditure Restrictions Liberalized**

Mr. Eno's amendment proposal to ease expenditure restrictions passed without opposition at the fifth annual meeting of the Board of Directors of the Eno Foundation for Highway Traffic Regulation, Inc. The meeting was held on October 13, 1926, at the Saugatuck home of Chairman Eno.

Dr. James R. Angell, President Emeritus, and Architectural Dean Everett V. Meeks of Yale University were elected to 2-year terms on the Board of Directors. H. Edward Bilkey of New York; Maj. Gen. Theodore Bingham, former Police Commissioner of New York City; and U.S. Senator James Couzens, former General Manager of Ford Motor Company and former Detroit Police Commissioner and Mayor, were elected to 1-year terms.

Others elected for 1 year were: Daniels, Hughes, Johnson and Loeb; and for 2 years, Bartlett, Ely, Eno, MacDonald and Tilden. Directors with expiring terms who were transferred to the Honorary Advisory Board were: Blanchard, Chapin, Cooke, Cox, Hatt, Inches, James and Palmer.

Resolutions were adopted advising against fixed-cycle traffic light signals until further consideration by the Board of Directors; favoring the standardization and uniformity of highway traffic regulations; and emphasizing "that traffic regulations are properly police regulations and should never be in the form of laws or ordinances." Mr. Eno's opposition to fixed-cycle unmanned signals was based on the assumption that they would not be obeyed, and would create traffic jams in one direction while giving the "go" signal to cross streets where there was little or no traffic.

### **Eno Makes Gifts to Foundation**

At a special Eno Foundation meeting November 9, 1926, in the office of Director Henry Platt in New York, a quorum was represented by President Bartlett, Bilkey, Ely and Platt.

Ely read a contract in which Mr. Eno proposed to make a gift to the Foundation on condition that the Foundation pay an annuity to Mr. Eno. A motion by Ely seconded by Bilkey carried unanimously to ratify the contract dated October 29, 1926.

A similar special meeting on March 19, 1927, also held in Mr. Platt's office, was attended by Directors Benton, Bilkey and Ely, who held proxies for a quorum. A contribution made to the Foundation by Mr. Eno and predicated on annuities in return was passed by unanimous vote. The stock given by Mr. Eno under this contract was selling at a very high price on the stock market, but the income received from it was inadequate to meet the annuity payments. On motion of Ely seconded by Bilkey and passed unanimously, the Foundation decided to sell the New York Bank and Trust Company stock and hold the money for the benefit of the corporation.

Mr. Eno sailed for Europe on March 12, 1927, planning to return on June 15. In Paris he found that crosswalks were being marked on the Champs Elysees, the famous and fashionable avenue, as he had recommended.

Before 1927 ended, Mr. Eno's plan for rotary traffic at the Rond Point on the Champs Elysees was also installed. The design was origi-



*Traffic on London's  
Piccadilly Circus.*

nally approved in 1912, but the execution of it was postponed, first on account of the caving in of the Avenue d'Antin (now Avenue Victor Emanuel III) over the catacombs, and again by World War I that put an end, for the time being, to improvements of that kind.

On the 1927 trip to Europe, Mr. Eno's sixth in the interest of traffic control, the major object of his crusade was to quiet the cacophony of automobile horns and other excess traffic noises on Paris streets. After the *Paris Herald* of June 27, 1917, published an article headlined, "American Traffic Expert Counsels Soft-Pedal for Paris Auto Horns," newspapers in the United States and Canada, as well as those of France, ran stories on the Eno proposals.

#### **Nine Directors Move to Advisory Board**

Eno Foundation's sixth annual Board of Directors Meeting was held October 11, 1927, at Mr. Eno's Saugatuck home. William Cox and Amos Richard Eno Pinchot, Mr. Eno's nephew, were elected to 1-year terms as Directors. Pinchot, a lawyer-publicist, was a Spanish-American War veteran. Reelected to the Board were Bilkey, Daniels, Hughes, Johnson and Loeb, whose terms expired at the meeting. At the same time, Directors Blanchard, Bingham, Chapin, Cooke, Couzens, Hatt, Inches, James and Palmer were transferred to the Honorary Advisory Board.

The Directors passed a resolution authorizing Mr. Eno to invite the following persons to serve on the Honorary Advisory Board: Col. Philippe Jean Bunau-Varilla; M. Chiappe, former Prefect of Police, Paris; Frank Elliott, former Assistant Commissioner in Charge of Traffic, New Scotland Yard, London; Nagatoshi Fujioka, Chief of Traffic Section, Metropolitan Police Board, Tokyo, Japan; Paul Guichard, Director General de la Police Municipale, Paris, France; Guy Kelcey, Traffic Engineer, Elizabeth, New Jersey; Mme. Robert Hughes Le Roux; Sir Henry Maybury, Consulting Engineer, Ministry of Transport, London, England; Adolph Max, Burgomaster, Brussels, Belgium; and Franz Seyffarth, Police Major, Berlin, Germany.

Mr. Eno reported to the Board of Directors that owing to Theodore McCrosky's having moved away from Saugatuck, the Yale Professor was no longer receiving a Foundation salary. This was the first

mention in the minutes of personnel employment. Most of the Foundation's staff work up to this time was done by Mr. Eno with the help of his secretary, Miss Briody, who was later named Assistant Secretary and Treasurer of the Foundation. He estimated the production of his office at an average of 2,000 letters and articles a year.

Directors passed a motion to pay Professor Charles J. Tilden a salary for work done for the Foundation, plus allowances. Another Board action approved payment to Mr. Eno to cover 1927 expenses incurred in behalf of the corporation.

### Hero at Panama and Verdun

Most famous on this all-famous list of persons was Colonel Bunau-Varilla (1860-1940) of Paris, a French engineer and diplomat. He was associated with De Lesseps in the Panama Canal venture and became chief engineer in 1885. As minister to the United States from Panama, he negotiated the treaty giving the U.S. control of the Canal Zone in 1903. "But for Philippe Bunau-Varilla," Mr. Eno wrote, "we Americans would have cut the Central American isthmus at Nicaragua instead of at Panama." And President Theodore Roosevelt admitted that "Bunau-Varilla brought Panama to me on a platter."

When the pivotal Battle of Verdun, "the greatest massacre of human beings in the history of the world," broke out on February 21, 1916, there was almost no typhoid among the troops. The entire French army was vaccinated against it in 1915. The 56-year-old Bunau-Varilla, as head of a battalion of engineers, was responsible for 400,000 men and 125,000 horses.

In the second half of the year, Indo-Chinese coolies arrived in the battle zone bringing new maladies that could be spread by contaminated water. At that time, water for the troops was doctored with so much chlorine that its taste was detestable. Troops would not drink the water, nor the soup and coffee that were made with it. They drank wine instead. Then Colonel Bunau-Varilla, benefiting from his experience in disease-ridden Panama, discovered that a quantity of one-tenth to one-fortieth of hitherto classic dosing of chlorine destroyed the bacteria instantly, but left the water palatable.

### Eno Caricatured in Paris Theaters

Mr. Eno and Colonel Bunau-Varilla had been friends for many years when circa 1909 the Enos were invited to dinner by the Bunau-Varillas. Also at the dinner were Monsieur R. Hughes Le Roux, one of the editors of *Le Matin* who was later a Senator, and Madame Le Roux. Monsieur Le Roux was largely responsible for the immense volume of favorable publicity Mr. Eno received in France, which even resulted in skits in Paris variety shows. One of them portrayed Mr. Eno as a character dressed like Uncle Sam giving traffic pap to the Paris Police Chief out of a bottle.

Monsieur Le Roux's secretary, William H. Dumont, represented Mr. Eno's traffic interests in Paris and translated his book, *Le Probleme de la Circulation*, and various other published materials into French.

Mr. Eno maintained a continuous friendship with Senator and Mme. Le Roux. The French couple visited at his Saugatuck home for 3 weeks in July 1925. They returned to France on September 12 and Senator Le Roux died November 15. The Senator was elected posthumously to the Eno Honorary Advisory Board.

### Mayor Who Defied the German Army

One of the most colorful associates on the Eno Honorary Advisory Council was Burgomaster Max, who won world fame and the lasting



*Traffic signals during the first 30 years of the century were characterized by their individualistic designs. Uniformity would shortly become important and dominate signal head design, but until it did, experimenters had their day.*



endearment of his fellow Belgians by defying the German invaders attacking Brussels, the capital, in August 1914.

When the enemy reached his city, Max had his chauffeur drive him out to meet the foe. German security forces stood aghast while the brash little Burgomaster rode through their lines. He reached the commander, but refused to shake hands with him, and demanded a conference with the Kaiser.

Burgomaster Max continued to protest infringement of Belgian civil rights and slept in his office rather than surrender his authority. But in September the Germans jailed him for the rest of the war. He then returned triumphantly to his position as head of the Brussels government, the office to which he was first elected in 1909, and remained in office until his death at age 69 in 1939.

The Burgomaster turned down King Albert II's offer of a Barony, saying that Adolph Max sounded better than Baron Max. Later, when King Leopold III offered the short, slight, bearded leader the premiership of all Belgium, Max declined this offer too, feeling that he could have no higher duty nor honor than being a faithful Burgomaster.

Burgomaster Max and Mr. Eno met several times, first at the Burgomaster's request relayed to Mr. Eno through their mutual friend, the Belgian Ambassador Baron de Cartier. They corresponded for 19 years, mostly about transportation matters, starting in 1920.

### **Eno Slowed Down by Operation on Hand**

Mr. Eno was laid up late in 1927 by a serious operation on his hand which affected the nerves and, as he said in a letter to Frank Elliott, "the operation has left me sort of out of commission." The indisposition caused him to turn down an invitation to judge a safety contest for the American Road Builders Association in Cleveland, Ohio.

Use of his hand returned before the Eno Foundation held its seventh annual meeting at Mr. Eno's Saugatuck home October 9, 1928.

### **Directors Assigned on Full Board**

The Board of Directors elected two new Directors, both from Yale University at New Haven, Connecticut. They were George Parmly Day, Treasurer, and Arthur T. Hadley, President. Day was the son of Clarence Day (1874-1935), author of *Life With Father*, the stage comedy that set a record of 3,183 performances. Clarence Day was a nephew of Benjamin Day (1838-1916), New York printer who invented the Ben Day process for shading in printed illustrations.

Terms of Directors were set as follows: 3 years—Bartlett, Ely, Eno, Kelsey, Pinchot, Sprague and Tilden; 2 years—Angell, Daniels, Hughes, Johnson, Loeb, MacDonald and Platt; 1 year—Benton, Bilkey, Cox, Day, Hadley, Hawes and Schley.

Chairman Eno was authorized to appoint four new members of the Honorary Advisory Board, as follows: Baron de Cartier; two members of the Yale University faculty, Dean Meeks and Professor McCrosky; and Capt. A.R. Piper, former Deputy Police Commissioner of New York City.

### **No Kind Words for Washington Traffic**

Mr. Eno's 1929 book *Simplification of Highway Traffic* received a large and favorable response from recipients at home and abroad. Capt. Thomas K. Hendrick (Yale 1912) of the engineering faculty at his alma mater, described the volume as "a classical presentation." "Furthermore," he added, "it is tempered completely with age, judgment and common sense. Like a good wine or a good whiskey, it has

that savor which newcomers in the field lack. I hope (also like good whiskey!) it receives the wide circulation it deserves.”

The author, however, had not tempered his criticism of bureaucratic bungling in the administration of traffic in Washington. A headline in the *Washington Daily News* read: “Nearly Everything the District of Columbia Does About Traffic Is Wrong, Book by William P. Eno, Noted Authority, Indicates.”

His recommendations to the nation’s capital were:

1. Take traffic control out of the hands of the utilities. “Streetcars and buses violate all regulations. Police, I’m told, can’t interfere.”

2. Place full authority for traffic in the hands of police. “Let engineers direct the laying out of painted lines, traffic guides, etc. Get men trained in street traffic work, not those trained in railroad light signals.”

3. Reduce vehicles to half speed at intersections and crosswalks.

4. Substitute the National Defense Traffic Code “for the present confusing regulations.”

Mr. Eno began to see a rainbow against the clouds of traffic chaos in the national capital just before the decade ended. He made a 2-hour appearance before a U.S. Senate committee, advocating traffic regulation reforms. Evaluating his testimony, he said afterward:

*I think seeds of good traffic have been planted more firmly than I was ever able to do before. The Washington papers have been most kind in their comments, and of course the police there are my friends anyway. The real trouble lies in the control over such matters by two or three influential men in Washington who are connected with the public utilities. When that triangle can be broken up we will have not only better traffic regulation in Washington but a better government there generally.*

### **Last Annual Board Meeting of the Twenties**

Members of the Eno Board of Directors met at Mr. Eno’s Saugatuck home on October 8, 1929, only 16 days before the stock market crash that triggered the Great Depression that put 12 million Americans out of work and 17,000 banks and other corporations out of business. The postwar prosperity party was almost over. Runaway inflation in wages, property values and stock speculation was rife as opposed to falling farmland and product prices and serious industrial slow-downs. It was in such an aura that the Eno board met briefly.

Two contracts for gifts by Mr. Eno to the Foundation were ratified. Seven directors whose terms ended at the meeting were reelected. They were: Benton, Bilkey, Cox, Day, Hadley, Hawes and Schley. Filling the vacancy caused by the death of Sophie Irene Loeb was postponed.

Thus ended the first decade of the Eno Foundation—the Roaring Twenties as the years were known. The organization had grown in numbers, strength and status. Mr. Eno, as Chairman, had gained global recognition. His traffic advice was sought by the world’s top government authorities. Active and Honorary Board members of high merit provided actual and moral support and leadership to his programs.

All was going well with the Foundation. Mr. Eno’s enthusiasm was dampened only by the distress he felt for his country. In a 1929 letter to his great friend, Colonel Philippe Bunau-Varilla in Paris, he wrote: “I am rather tired of America in the condition in which it now is. It seems to be getting worse and worse all the time and discourages anyone who has any affection for his country. I don’t know what we are coming to unless we get someone in power who has great influence and authority.”



## CHAPTER 11

# Europe Welcomes Eno

While in London in July 1930 on his seventh trip to Europe on a mission of traffic control, Mr. Eno was shown a picture of what was probably the first changeable traffic light in existence. The device was equipped with green and red gas beacons. When tried out in December 1868 on Bridge Street it blew up and was not replaced. The event was recorded by Mr. Eno with amusement; he never did like unmanned electric traffic lights either.

In Paris he addressed the American Club on traffic conditions, emphasizing that too much horn-blowing marred the comfort of travelers in the city.

In Berlin he was showered with hospitality at luncheons and on tours by police executives who won his praise for their fine traffic system and for the courtesy extended by policemen to civilians. He was particularly impressed by the training of police horses. "The officers were firing pistols and pounding tin cans, while men on motorcycles were passing in and out between horses, and making all possible noises to train the horses to ignore everything but their rider's commands. The horses were the best I have seen in any police department since about 1915 in New York."

Meanwhile, the Eno Foundation for Highway Traffic Regulation offered its resources to the Connecticut Department of Motor Vehicles for the Save-a-Life campaign conducted by several New England states during August, and agreed to make special traffic studies in Connecticut whenever called upon.

On October 1, 1930, *The New York Times* reported that the reason for Mr. Eno's foreign visit was to warn the Europeans against adopting American traffic light systems "operated by men who could not see the traffic they were trying to regulate." On the same date he boarded the *Ile de France* to return home, accompanied by some passengers on their way to attend the Sixth International Road Congress in Washington, D.C.

### Eno Entertains Foreign Dignitaries

Upon his arrival in Saugatuck, Mr. Eno went to Washington to help delegates from England and France, whom he knew well, and to meet other delegates, especially those from Italy. He entertained several delegates and introduced Frank Elliott to President and Mrs. Calvin Coolidge. Elliott, a member of the Honorary Advisory Board of the Eno Foundation, was Assistant Police Commissioner of New Scotland Yard in London. Elliott and another Council member, Sir Hugh Turnbull, Commissioner of Police for the Old City of London, spent 1 week each visiting Mr. Eno at Saugatuck after going on tours of the United States.

### The Traffic Laboratory at Judah Rock

Mr. Eno was back at the Eno Foundation headquartered in his home at Saugatuck in time for the ninth annual

meeting of the Board of Directors. He set aside space at the residence as a laboratory for his and the Foundation's traffic work. Located in "a fine old room on the main floor of Judah Rock, the stately Eno mansion on the Saugatuck waterfront," the laboratory was "filled with files of letters and documents, charts and textbooks, the work of a lifetime in a civic labor of love."<sup>2</sup> When some of Mr. Eno's street traffic charts were too big to handle on his regular drawing boards, he had to use his billiard table.

### Death Claims Three Directors in Year

Mr. Eno presided at the Directors' annual meeting October 14, 1930, in the absence of President Bartlett. He announced that it was his sad duty to inform the Board that three Eno directors had died since the last meeting. They were Hector J. Hughes, March 1, 1930; Arthur T. Hadley, March 6, 1930; and Clarence H. Kelsey, April 30, 1930. Appropriate memorial resolutions were adopted.

The Board employed Fritz Malcher of Vienna, Austria, and New York, a highly skilled city planner, for 1 year "for certain work" starting November 15, 1930.

### Foundation Has Officer Shakeup

Until the Eno Foundation for Highway Traffic Regulation Directors met on October 15, 1931, the organization had the same officers it had elected since the first meeting in 1921. In the 1931 elections Mr. Eno remained as Chairman of the Board and Ely continued as Secretary and Treasurer, but Tilden was elevated from Vice President to succeed Philip Bartlett as President.

Robbins B. Stoeckel of Hartford, Connecticut, was elected First Vice President; Mr. Eno's nephew, Amos R.E. Pinchot of New York, was elected Second Vice President.

Directors Bartlett, Ely, Eno, Pinchot, Sprague, Stoeckel and Tilden were elected to fill the places of Directors whose terms expired at the meeting. Malcher, having completed a contracted year of employment by the Foundation, was appointed to the Honorary Advisory Board.

### First New President in Decade

The new President of the Eno Foundation, Professor Charles J. Tilden, was elected to the position 12 days after his fifty-eighth birthday. He had been a Director and Vice President for the 10 years since the organization was founded. Unlike his predecessor, President Bartlett, who was a member of the law firm that handled the Eno family legal affairs, Tilden was a professional civil engineer who had been a student and historian of traffic problems for a long time. He met Mr. Eno in 1921, the year the Foundation was established. They were immediately attracted to each other by their mutual interest in safety and order on streets and highways.

A native of Brookline, Massachusetts, and the son of a well-known Boston architect, Tilden was a Phi Beta Kappa graduate of Harvard University in 1896 with a Bachelor of Science degree in Civil Engineering. The University was reluctant to see him leave, so employed him over the next 2 years on a part-time basis as an assistant instructor. His duties included teaching at Harvard's summer camp on Professor Shaler's Martha's Vineyard estate.

For the next 6 years, 1897-1903, he was an assistant engineer for the New York Rapid Transit Commission, serving on a large staff that worked on details of steel construction on the first subway constructed in New York. It ran through the middle of Manhattan Island

<sup>2</sup>Quoted from *The Bridgeport (Connecticut) Post*.



*Mr. Eno spent much time in his Saugatuck home office directing the affairs of the Foundation.*



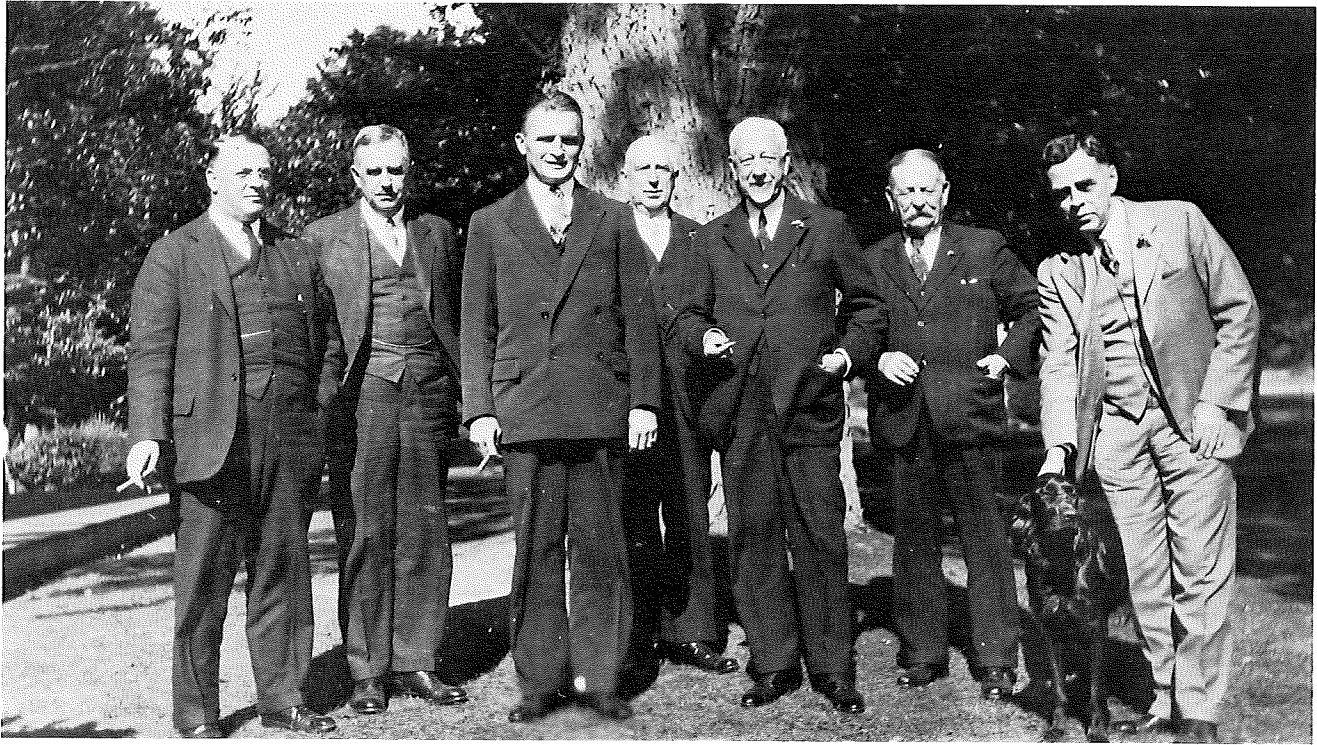
### Simsbury Hall Honors Eno Parents

On May 30, 1932, a new Colonial style Town Hall and auditorium was presented to Simsbury, Connecticut, as a memorial to Mr. Eno's parents, who lived in Simsbury before going to New York and returned there to spend their summers.

The building, still standing and in daily service, is situated on two acres on Hopmeadow Street, which is said to be "one of the most charming Main Streets in all New England." Eno Memorial Hall was constructed of red brick with white trimmings and has a tower containing a town clock. The building was given to Simsbury by Mrs. Antoinette Eno Wood, William Phelps Eno's sister and a Simsbury resident. Space was set aside for Daughters of the American Revolution, Girl Scouts, and the Simsbury Historical Society. The principal speaker for the dedication ceremony was Mr. Eno's nephew, Governor Gifford Pinchot of Pennsylvania, the nation's leading conservationist. Mrs. Wood did not live to see the building completed. She died at her Washington home on January 11, 1930.

Antoinette Eno incurred her father's displeasure when she married one of his business partners, Charles Boughton Wood, who was a generation older than she was. They had no children.

The Simsbury Town Hall resembles in many respects the Eno Foundation headquarters at Saugatuck in Westport, Connecticut, which was dedicated as a gift of William P. Eno 7 years later.



*Charles J. Tilden (far right)  
with Mr. Eno and guests.*

with branches to the east and west. The builders encountered new problems of engineering, one of the most difficult being the rearrangement and relocation of water, sewer and gas services in the subway tunnel's path.

When the subway's opening day was celebrated in 1903, Tilden was starting a 2-year term as instructor in engineering at Cornell University in Ithaca, New York. Beginning an 8-year residence at the University of Michigan, Ann Arbor, in 1905, he was Assistant Professor of Civil Engineering 6 years and head of the Department of Engineering Mechanics 1912-1913. His next move was to Johns Hopkins University at Baltimore where he accepted the chair of Civil Engineering to build the Department. While he was at Johns Hopkins he anticipated the United States' involvement in World War I and attended Fort Myer and Plattsburg training camps in 1916. He was one of the first engineers to be commissioned as a Captain in the Engineering Officers Reserve Corps.

In 1919 he received an honorary Master of Arts degree from Yale University and joined the faculty at New Haven as Strathcona Professor of Engineering Mechanics, a position he maintained for 21 years that overlapped his tenure as a director and officer of the Eno Foundation. Lord Strathcona (1820-1914), "the grand old man of Canada," is famous as the financier and builder of the transcontinental Canadian-Pacific Railway. He bequeathed 100,000 pound sterling to Yale. The gift was held in escrow until it was used to fund two professorships, the one held by Professor Tilden and the other in mechanical engineering.

While at Yale, Professor Tilden served on the Connecticut Highway Safety Commission (1936-1942). As a member of a municipal committee investigating certain traffic problems in New Haven, he represented a minority favoring the elimination of parking around a city park near Yale. He talked so long in favor of his cause that he was fined for parking overtime in the area under dispute.

Some of the traffic reforms sought by Tilden (many of them now in

effect) were written questions and driving tests for licensing drivers, establishment of Eno-developed safety islands to protect pedestrians crossing wide thoroughfares and periodic safety inspection of vehicles. He did not agree with Mr. Eno's proposal of a 45-mile-per-hour speed limit on all automotive traffic. "I certainly hesitate to say speed is the greatest cause of accidents," he said. "If speed is properly provided for it could be made safe. A specially designed highway and car and an adequately trained driver, these three in combination could merit a fast pace, but this is under ideal conditions, naturally."

### Eno Becomes Temporary Democrat

Mr. Eno was seriously concerned with the state of the nation in the depression year of 1932. Writing to a friend in January he said that he was a "temporary Democrat" for the presidential election. "I have always been a Republican until the last election," he wrote. "I have no admiration for our present incumbent (Republican President Herbert Hoover)." He added that he thought it would be impossible for President Hoover to be reelected.

Writing to Police Major Seyffarth in Berlin on the following February 18, Mr. Eno said he had been "overwhelmed with problems of various sorts, personal and otherwise, which have slowed me up on all the things I wanted to do."

The records showed that although Mr. Eno maintained a heavy volume of correspondence, he depended more and more on President Tilden for the operational leadership of the Foundation. Major Benton noted Mr. Eno's "indisposition" in April, and in mid-May Mr. Eno wrote Sir Hugh Turnbull in London: "About March 10 I was taken down with gripe. I had a fever for 4 weeks and have been trying to recuperate ever since. I am all right in every way, but get tired very quickly."

Two special meetings of the Eno Foundation's Board of Directors were held in 1932, on February 8 and May 5, both in New York and both to approve the Foundation's sale and purchase of securities.

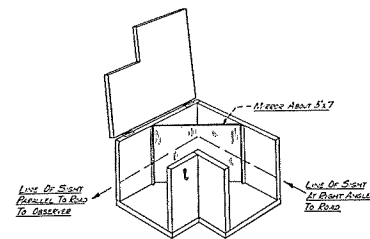
### Tilden's Enoscope Detects Speeders

During the summer of 1932 Professor Tilden invented a device for measuring the speed of automobiles. The Enoscope, as it was called, was introduced in several states. It consisted of a black L-shaped box with two open sides and a mirror attached across the interior angle. The operator set the scope on a fixed tripod at a measured distance to the spot the car would first pass. When the blip of the moving vehicle registered on the mirror the operator would start his stopwatch. When the car reached the operator's position he would stop his watch. The elapsed time compared to charted time/distance relationships would indicate the miles per hour.

For example, the base line from the scope position to the check-point was 176 feet. If the timing was four seconds the speed was 30 miles per hour; six seconds, 20 miles per hour, and so on. The box was a forerunner of today's use of radar for speed detection and an improvement over the earlier method of placing two policemen at a measured distance apart and connected by telephone.

The Enoscope was used in a 1930s speed survey in which more than 45,000 observations were made. Conducted in the state of Connecticut by the Commission of Vehicular Traffic, it was sponsored by the Transportation Committee of Yale University, Eno Foundation for Highway Traffic Regulation, the U.S. Bureau of Public Roads, and the Connecticut Highway Department.

The average speed for all vehicles was 40 miles per hour. Out-of-state drivers had a higher average speed than Connecticut motorists.



*To use this speed measuring device, it is mounted on a camera tripod at a convenient height and set on the roadside a few feet in from the pavement. One of the open ends of the L-shaped box points directly across the road, while the other is directed toward the observer. The mirror, standing vertically, is thus set at an angle of 45 degrees to each of these sight-lines. The observer, looking parallel to the road and into the open end of the box, can see in the mirror directly across the street from the point where the box is set. An approaching car, as it passes the box, makes a distinct flash or flicker in the mirror that is readily seen by the observer. The instant he gets this flash he presses the starting button on a stop-watch, which he holds in his hand. The observer is positioned a known distance from the box, enabling elapse times to be compared to a speed/distance table to determine speed of vehicle.*



*Antoinette Eno Wood*

Buses were faster than passenger cars, and women had a slower average speed than men.

Yale's Transportation Committee included Professors W.M. Daniels, R.B. Stoeckel and C.J. Tilden, all members of the Eno Foundation Board of Directors.

### **New Name Adopted for Honorary Board**

At the eleventh annual meeting of the Eno Foundation's Board of Directors at Mr. Eno's home in Westport on October 11, 1932, Chairman Eno and President Tilden were the only directors present in person, but 16 sent proxies.

Memorial resolutions were passed on the deaths of two of the most important officers, both of whom had been Directors since establishment of the Foundation. Philip G. Bartlett, President for the first 10 years, died August 2, 1932, and David J. Ely, Eno Secretary and Treasurer since the beginning, died August 23, 1932. Both were members of the same New York law firm.

Actions were taken to amend the bylaws to change the name of the Honorary Advisory Board to the Honorary Advisory Council, make the Board of Directors' Chairman the ex-officio Chairman of the Council, remove the limitation on the number of Council members, and delete the article preventing persons active in police or municipal offices from joining the Council.

Guy Kelcey of the Signal Service Corporation in Elizabeth, New Jersey, was elected to fill the unexpired term of the late Mr. Bartlett. No nomination was made of a successor to the late Mr. Ely as Secretary and Treasurer. The matter was referred to the Chairman and President with power to act.

The Chairman, President, Secretary and Treasurer were designated as a Finance Committee to consider and act upon all financial matters pertaining to the Foundation.

### **Eno Has Shortage of Cash**

Although understandable under conditions of the Great Depression of the 1930s, but seemingly the acme of inconsistency today, was the fact that the millionaire William P. Eno, who almost solely financed the Foundation that bore his name, called upon that organization to advance him \$500 to meet a commitment. But that is what happened, according to the following quotation from the Board of Directors' minutes of October 11, 1932: "Not having much cash, Mr. Eno requested the Eno Foundation on February 19, 1932, to pay the Yale University Alumni Fund the sum of \$500 and now that amount is charged off against the expenses of Mr. Eno. Mr. Eno expressed the willingness to let these items balance each other and the Board gratefully accepted the action."

Times have changed in other ways. In that same year Mr. Eno wrote to a University of Pittsburgh student, James E. Loughran, "I should go so far as to prohibit any speed anywhere at any time exceeding 45 miles per hour." Today, 45 miles per hour is near the minimum, not the maximum speed.



## CHAPTER 12

# Foundation Affiliates With Yale

From the inception of the Eno Foundation, its founder hoped that it would some day become an affiliate of Yale University, his alma mater at New Haven, Connecticut. In fact, the commuting proximity of the University was one reason Mr. Eno placed the headquarters in Westport, not in New York, where he often conducted business, nor in Washington, where he had his principal residence. He referred to Judah Rock in the suburban village of Saugatuck as his "country home"—about 35 miles by modern Interstate highway from New Haven. He loaded his Board of Directors with Yale men and boasted once that two out of three members of the Eno Board were Sons of Eli.

After a long courtship between the institutions, the Eno Foundation became a legally connected associate of Yale in April 1933 without ceremony or fanfare. The University approved a contract of cooperation in furthering purposes and objects of the Foundation. The primary duty of the Foundation was to study and investigate problems of highway traffic regulation and related subjects in association with Yale. The University was to assume no financial responsibility, but was to have an oversight role regarding the Foundation's finances. And the Foundation would bear the clerical costs that Yale might have in the joint arrangements. The Foundation, on the other hand, would retain its autonomy and Mr. Eno reserved the right to rescind or terminate the agreement during his lifetime.

### **New Secretary and Treasurer Elected**

The special Foundation committee of Chairman Eno and President Tilden met the first day of 1933 and elected a temporary successor to the late Secretary-Treasurer Ely. Philip D. Hoyt, First Deputy Commissioner of Police in the City of New York, was named Secretary. In anticipation of linkage with Yale, George P. Day, Treasurer of Yale University, was chosen as Foundation Treasurer. Mary S. Briody was appointed Assistant Secretary.

A month later Mr. Eno made a vain plea to Connecticut Governor Wilbur L. Cross to keep Robbins B. Stoeckel as Commissioner of Motor Vehicles for the state, describing him as "the best exponent of traffic regulation in Connecticut." Mr. Eno reminded the Governor that Mr. Stoeckel, First Vice President, was one of 14 Yale men on the 21-member Eno Foundation Board of Directors.

Among the newer members of the 1933 Honorary Advisory Council were: Alfred Edward, former Chief of Traffic in Sydney, Australia; Dr. W.K. Hatt from the Eno Board of Directors; Fritz Malcher, Town and Traffic Planner, New York; Hon. Rupert Mitford, London; H. Alker Tripp, Assistant Commissioner of Metropolitan Police, New Scotland Yard, London; and Sir Hugh Turnbull, Commissioner of Police of the Old City of London, England.



## War Clouds on European Horizon

Political events were heating up in Europe in 1933—the year Chancellor Hitler withdrew Germany from the League of Nations and the disarmament conference—and Mr. Eno was concerned about the international situation. On May 5 he wrote his friend, Police Major Seyffarth in Germany:

*We are all mixed up all over the world now, it seems, but perhaps it is just as well for us all to wait a while before expressing a definite opinion.*

*I am very much pleased with (President) Roosevelt's work. I have known him very well for a good many years and like him personally immensely. He certainly seems to have arisen to the occasion and I hope he will continue and that Congress will grant him as much power as he needs to pull us out of the trouble we're in.*

Major Seyffarth had been very circumspect in his communications to Mr. Eno. "I am now in the difficult position to explain to you the change which took place here," he wrote. "A short time after the change in the Prussian government which greatly influenced the Berlin Police Department I had to change my position. I lay stress on saying that I always have been outside of politics." The Major had been transferred from his high position in the Capital and reduced to the title of Oberstleutnant of a rural district near Cologne.

In a letter to Major Seyffarth regarding a previous European trip, Mr. Eno said: "(Italian Premier Benito) Mussolini thanked me for the book (Eno's *Simplification of Highway Traffic*) and I should have presented letters of introduction to him had it not been for the fact that the poor man must be so busy doing the great work he has undertaken and I did not want to bother him."

## Eno Lauds European Traffic Control

In 1933, Mr. Eno made his eleventh voyage to Europe since 1900, his eighth on missions of traffic control. He found that "they are doing wonderfully well" in France and Italy; "in fact, far better than in most places in America," and in London traffic was best of all.

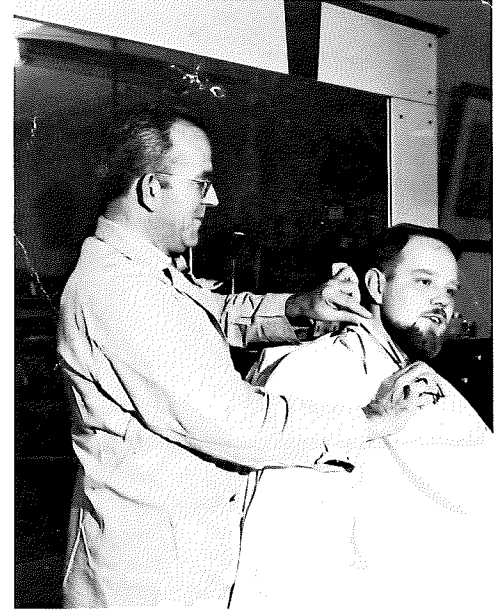
"I was not prepared to find traffic so well regulated in Italy," Mr. Eno reported, "although I have always had the highest admiration of Premier Mussolini and his great ability for thoroughness. There was nothing in *Simplification of Highway Traffic* which they had not adopted and done well."

He recommended that American traffic students and specialists go to Europe "so they can fit themselves better for traffic regulation at home."

Upon his return to America he made a gift of half a million francs in French currency to the Eno Foundation.

Back at his Saugatuck home and office he entertained three foreign officials who came to interview him on solutions to traffic problems. They were Dr. Eugen Bianu, Director of Police in Bucharest, Romania; Florent E. Louwage, Commissioner of Police in Brussels, Belgium; and Carol Tarcauanu, Romanian consul. Dr. Bianu and Commissioner Louwage subsequently became members of the Eno Foundation's Honorary Advisory Council.

Later in the year Mr. Eno and Dr. Commendator Cesare Solari, Chief of the Mounted Police in Milan, Italy, became the first honorary members of the Institute of Traffic Engineers in recognition of "notable and outstanding services" in traffic engineering. Dr. Comm. Solari later joined the Eno Advisory Council.



## Eno From His Barber's Viewpoint

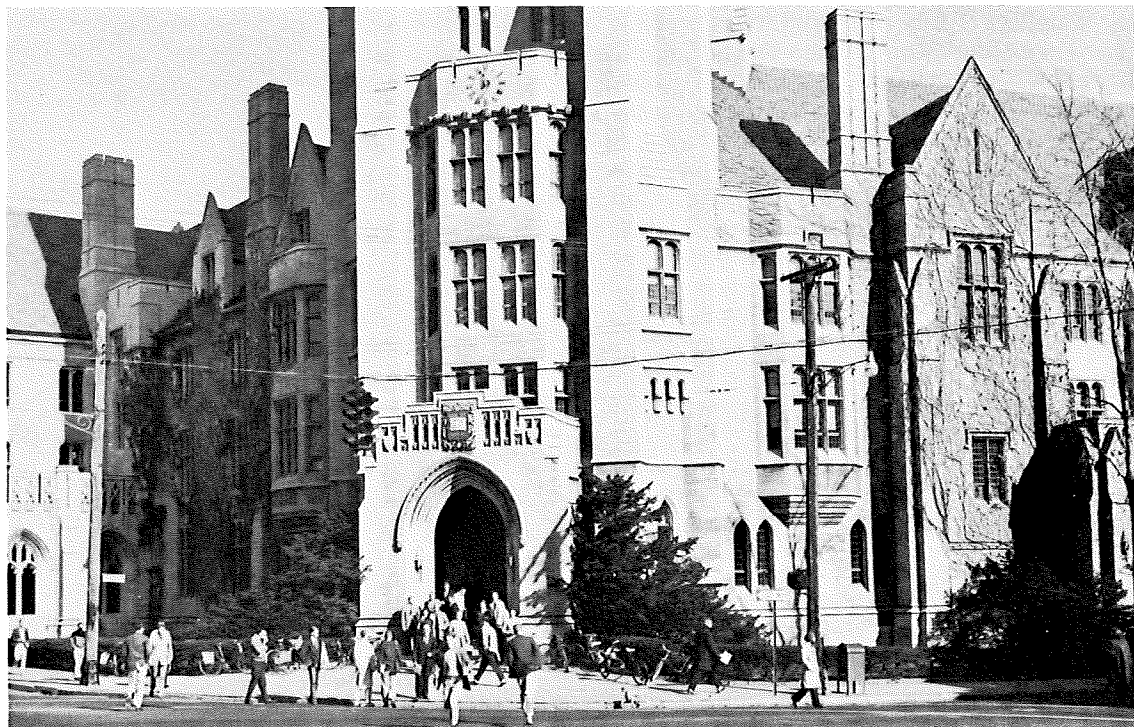
Mr. Eno was a great admirer of Mussolini, according to his barber, John Santella, who is now retired from his Saugatuck shop. For 15 years Mr. Santella had an appointment every Sunday with Mr. Eno to cut his hair and trim his beard at Judah Rock. When he first started this association the going rate for a haircut at the shop was 25 cents, but Mr. Eno paid him \$2 for each Sunday morning service.

Mr. Santella remembers his tonsorial customer as a man with "a good head" of gray hair, a handsome gray Victorian beard and mustache; as a neighbor of generous disposition, pleasant humor and interesting conversation; and as a friend who gave him the gift of a book every Christmas, usually one he had written himself.

A native of Italy who has lived in the United States more than half a century, Mr. Santella did not share Mr. Eno's high regard for Mussolini—"Il Duce was too dictatorial"—but Mr. Eno saw Mussolini as the ruler who had heeded his advice, ended the raucous horn-blowing in Rome and throughout Italy, and adopted Mr. Eno's traffic plans almost completely for his country.

Mr. Eno wanted Mr. Santella to go to Judah Rock and shave him every day, but the barber could not spare the time from his shop. Mr. Eno shaved himself on weekdays. Mr. Santella never knew him to drive an automobile, but he said his wife, Mrs. Alberta Eno, was a good driver.





*ITE's first home was located on the second floor Strathcona Hall, Yale University.*

New members of the Council included Charles C. Cook, Chairman of the East Side Fire District of West Hartford, Connecticut, and Maj. Gen. Mason M. Patrick, retired U.S. Army officer.

#### **Twelfth Annual Directors' Meeting**

At the twelfth annual meeting of the Board of Directors of the Eno Foundation for Highway Regulation, Inc., at Saugatuck on October 13, 1933, Directors present in person were Chairman Eno, President Tilden and Assistant Secretary Briody. Those sending proxies were: Angell, Benton, Bilkey, Cox, Daniels, Day, William J. Eynon, Hawes, Hoyt, Johnson, G. Kelcey, MacDonald, Clarence W. Mendell, A. Pinchot, Platt, Schley, Sprague and Stoeckel.

Angell, Daniels, Day, Eynon, Johnson, Platt and Philip K. Smith were elected to 3-year terms. Mr. Smith, like the late Directors Bartlett and Ely, was a member of the New York law firm of Simpson, Thacher and Bartlett.

A memorial resolution was passed on the death of Fritz Malcher of New York, a member of the Honorary Advisory Council and former member of the Board of Directors of the Eno Foundation. He died October 4, 1933.

Officers elected for the coming year were: William P. Eno, Chairman of the Board; C.J. Tilden, President; Robbins B. Stoeckel, First Vice President; Amos R.E. Pinchot, Second Vice President; George Parmly Day, Treasurer, and Mary S. Briody, Secretary.

In view of the fact that the Foundation owned one-fifth of the capital stock of Sprague Meter Company, officers were authorized to seek representation on the Sprague Board of Directors.

#### **Eno Weds Alberta Averill Paz**

The big event of 1934 for Mr. Eno was matrimonial. Widowed since the death of his first wife, the former Alice Rathbone, in 1911, Mr. Eno married again on April 18, 1934. His bride, in a Washington wedding, was Alberta (Averill) Paz, the former wife of Miguel Paz and

the daughter of Albert Weston Averill, a New Orleans steamship official. The second Mrs. William P. Eno served on the Eno Foundation Board of Directors and joined her husband in entertaining many world leaders in the fields of traffic and transportation.

When Mr. Eno published his last book, *The History of Highway Traffic Control*, in 1939, he inscribed on the frontispiece, "To my wife, Alberta Averill Eno, whose interest, intelligence and ability fit her to carry on the work, begun 40 years ago, I dedicate this, my sixth book on traffic."

In response to an Eno wedding announcement, Mrs. Alfred Edward of Sydney, Australia, wrote Mr. Eno that her husband died May 21, 1934, after seizure by an apoplectic stroke. Mr. Eno and Mr. Edward, both intensely interested in traffic, had been friends and correspondents for 30 years. Mr. Edward was in charge of traffic for the Sydney Police Department.

"I too have passed through the same trouble that you are going through now," Mr. Eno wrote Mrs. Edward. "Time helps, of course, but nothing blots out the entire sorrow."

### **Yale Establishes Traffic Bureau**

A development closely related to the Eno Foundation's work was the establishment by Yale University, in November 1933, of the Bureau of Highway Traffic Analysis under Prof. Robbins B. Stoeckel. Yale President James R. Angell said the Bureau would offer services to industry, private organizations and the public. It became a valuable source of professional service in and for the Eno Foundation.

### **Exchange of International Views**

Mr. Eno continued to view global affairs with anxiety. In a September 29, 1934, letter to his friend, Major Seyffarth, in Germany, he wrote:

*The world doesn't seem to be going very well, but if we have patience I think we will pull out after a while. I have been watching what has been going on in Germany and I believe you have a great man in command. He said one thing that I have not forgotten and that is that other nations will be following him later. I wish he would hurry up and do it . . .*

*Our conditions here are trying, but we too hope to pull out later after changes in policy which are surely necessary. At any rate, if there is ground for criticism by any countries of another one, I think it should be deferred until later when we will be more apt to get the truth. Meantime, good luck to Germany. (Upon the death of President Hindenburg on August 2, 1934, Chancellor Hitler had become absolute dictator of Germany. Mr. Eno, as did most others at this point, did not have reason to suspect the future anguish Hitler would bring to the world.)*

On December 13, 1934, Major Seyffarth mailed a Christmas greeting to Mr. Eno, including these paragraphs:

*The great thing in Germany today is the program of Chancellor Hitler providing for new motor roads on a large scale. The U.S.A. certainly did more in road building during the last 15 years, but what we do is a great thing for Germany, and it provides work for many thousands. (Editorial note: The world knows now that Germany's "new motor roads" [the autobahn] were designed for blitzkrieg warfare and military aviation ground services.)*

*It goes without saying that the difficult problems confronting*



*William Phelps Eno married his second wife Alberta Averill Paz in 1934.*

*Germany after the Treaty of Versailles cannot be solved by the methods of our former government. Let us hope that good will come at last to the peoples of the entire world.*

### **Thirteenth Annual Meeting Is Routine**

The thirteenth annual meeting of the Eno Foundation for Highway Traffic Regulation was held at Saugatuck on October 9, 1934. A resolution was adopted memorializing William J. Eynon, a member of the Board of Directors who died January 16, 1934. Dr. Miller McClinck, Director of Erskine Bureau for Street Traffic Research at Harvard University, was elected to fill his unexpired term for 1 year.

Directors elected for 3 years were: Eno, Mrs. Eno, Kelcey, A. Pinchot, Sprague, Stoeckel and Tilden.

The following were elected to the Honorary Advisory Council in addition to Dr. Bianu of Romania and Commissioner Louwage of Belgium: Lee Eynon; Burton W. Marsh, President of the Institute of Traffic Engineers; Dr. Shigeru Matsui, Vice President of the Police Association of Japan; and George C. Warren, an executive of the American Society of Municipal Engineers.

All officers were reelected.

### **Mussolini Silences Italian Horns**

On January 20, 1935, *The New York Herald Tribune*, under the headline, "Ban on Auto Horns Quiets Rome," reported: "As if someone had waved a magic wand, Rome has been transformed from the reported noisiest city in the world to the most silent." The waver of the wand was, of course, Benito Mussolini, who justified Mr. Eno's admiration as a traffic controller. Commented *The Washington Times*: "Mussolini has this matter (traffic noise), as well as pretty much everything else, under control."

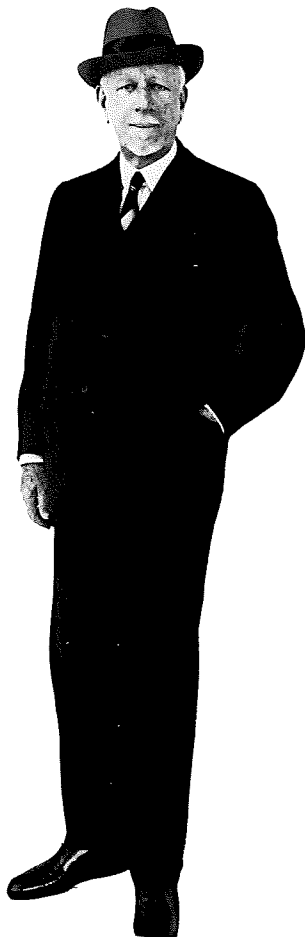
The Italian Premier issued an edict December 15, 1934, forbidding the use of the motor horns in cities and for ten kilometers (six miles) outside. The edict followed a 6-month trial of automobile silence at night. "If it works as well as this at night," Mussolini concluded, "it ought to work better in the daytime." Unexpectedly, the Italian accident rate was appreciably reduced.

### **Eno Takes Bride to Europe**

Mr. Eno, accompanied by his bride, returned to Europe in 1935 for his ninth traffic mission to the continent, arriving at Naples, Italy, from Cairo, Egypt, on April 4. Then he went directly to Paris, at the request of French authorities, to seek an end to the pervasive traffic sounds, particularly those of Klaxon horns. Abbe Ernest Dimnet, the internationally acclaimed French writer and subsequent member of the Eno Foundation's Honorary Advisory Council, wrote that "the return of William Phelps Eno is a joy to lovers of Paris; all his visits have been blessings to the city." Two dozen French newspapers joined him in welcoming Mr. Eno and his continuing anti-noise campaign. Dr. William Lyon Phelps of Yale University, just back from Europe where he had lunch with the Enos and Abbe Dimnet, wrote in *The New Haven Register*: "Those of us who remember the continuous blowing of motor horns in Paris a few years ago were impressed by the comparative silence now observable."

For some time after the Enos returned to the States, stories about the interest the Mayor and Police Department of New York had in suppressing urban noise appeared in the newspapers, but no action was taken.

Two honors in recognition of Mr. Eno's traffic accomplishments were bestowed on him that summer. He was elected honorary Presi-



dent of the National Pedestrian Association and also of the National Highway Traffic Association. And the day after Christmas he was promoted from Knight to Officer in the Legion of Honor of France in recognition of his assistance in controlling traffic in that country.

### **Advisory Council Strengthened**

When the Eno Foundation for Highway Traffic Regulation held its fourteenth annual meeting October 8, 1935, at Mr. Eno's Saugattuck home, those present in person were Chairman and Mrs. Eno, President Tilden and Miss Briody, Secretary. Thirteen sent proxies.

Articles of affiliation between the Eno Foundation and Yale University were ratified.

Directors Benton, Cox, Roy W. Crum, MacDonald, Mendell, Schley and Sidney J. Williams were elected to 3-year terms.

The following additions were made to the Honorary Advisory Council: Chief Inspector John Day, London; Abbe Dimnet, Paris; Lt. Col. Robert C.F. Goetz, Fort Sill, Oklahoma; William Leon Graves, New York; Maxwell Halsey, New York; John Nolen, Cambridge, Massachusetts; Ernest H. Peabody, New York; Governor Gifford Pinchot, Milford, Pennsylvania; Hugh Burton Robinson, Paris; Theodore Rousseau, Paris; Daniel S. Sanford, Redding Ridge, Connecticut; Flaval Shurtleff, Bridgeport, Connecticut; Hawley S. Simpson, New York; Hakan B. Steffanson, New York; S.W. Taylor, New York; William A. Van Duzer, Washington, D.C.; Joseph T. Woodruff, Bridgeport.

Directors H. Edward Bilkey and Alfred Hawes automatically became members of the Council.

### **R and D Editor Rejoins Eno**

Included among the new council members was Samuel W. Taylor who, as editor of *The Rider and Driver*, was Mr. Eno's chief advocate in the early 1900s when Mr. Eno was struggling to get his traffic proposals accepted. Colonel Goetz, who was destined to lead the Eno Foundation, was married to Mr. Eno's niece and Governor Pinchot was Mr. Eno's nephew.

The Paris members were Dumont, newspaper man and translator of Eno books into French; Robinson of the U.S. Line; Rousseau of the Guaranty Trust Company of New York, and Abbe Dimnet, the writer. Inspector Day was Superintendent of the Traffic Department of New Scotland Yard.

The domestic list included Nolen, landscape architect; Peabody, President of the League for Less Noise in New York; Shurtleff, counsel for the Fairfield County (Connecticut) Planning Association; and Simpson, Secretary of the Institute of Traffic Engineers.

An Executive Committee elected by the Board of Directors consisted of Tilden, Chairman; G. Day, Mrs. Eno, W.P. Eno, Amos R.E. Pinchot, P.K. Smith and R.B. Stoeckel. Elected to the Board's Committee of Traffic Engineers were Directors Cox, W.P. Eno, Johnson, Kelcey, McClintock, Stoeckel and Tilden.

All officers were reelected.

### **New Era of Change in Foundation Begins**

Thus ended an era that marked the birth and growth of the Eno Foundation to become a mature organization. Before Directors would be called again into annual session, the organization would be sharply revised in structure and personnel while focusing on and broadening its already conceived purposes.

Perhaps the changes were discussed on January 20, 1936, when Directors and members of the Honorary Advisory Council living in



*A 1935 Paris news item said "Mr. William Phelps Eno, the American traffic expert whose ideas have been adopted in many of the principal capitals, and who is paying a visit to Paris, thinks that traffic is as well regulated in the French capital as anywhere, and perhaps a trifle better. He is now turning his attention to the reduction of noise."*

the Washington area met at Chairman Eno's home on 1771 N Street. Those attending included Senator James Couzens, Roy Crum, Stephen James, Dean A.N. Johnson, Gen. M.M. Patrick, Governor Pinchot, Charles J. Tilden and William A. Van Duzer.



## Foundation Gets a New Look, Name and Home

A special meeting of the Eno Foundation was held on February 18, 1936, at Yale University to repeal the existing Eno Code of Laws.

Mr. Eno did not attend, but sent his proxy and a letter of suggestions. Evidently he had directed the formation of a new set of bylaws that would reduce the size of the Board of Directors from 21 members in rotation to a seven-member annually elected body.

"As I understand it," he wrote, "Directors to be reelected are: myself, Tilden, Stoeckel, Pinchot, Day, Philip K. Smith and Mrs. Albert A. Eno. I think it would be appropriate to give Mrs. Eno the title of Resident Director and to appoint Miss Briody as Assistant Secretary and Treasurer instead of Assistant Secretary.

"The other 14 who were members of the former Board I presume will be reelected as members of the Board of Consultants and to 1, 2 or 3 years as provided by the bylaws."

The old code was repealed, the new one accepted, and all Mr. Eno's suggestions were approved.

### **New Bylaws of Eno Foundation**

Salient points in the new regulations, besides reduction of the size of the Board of Directors, included the following:

1. The property, affairs and policy shall be vested in and controlled by the Board of seven Directors who shall be elected for 1-year terms or until the next annual meeting.

2. Directors shall not be paid for acting as such, but may be compensated for other work and expenses.

3. Members of the Corporation shall be limited to surviving subscribers to the Articles of Association of the Corporation and the Board of Directors.

4. A Board of Consultants shall consist of 14 (later increased to 21) divided into three classes, each term to be 3 years after the pattern is established. Consultants shall be elected by the Board of Directors at any regular or special meeting. Compensation regulations for Consultants shall be the same as for Directors. Duties of Consultants "shall consist of counseling with the Board of Directors on technical matters and any other matter that may be desired."

5. Honorary Advisory Council members shall be elected by the Board of Directors without limitation as to number. In electing members of the Council, the Board "shall take into consideration the value of voluntary and unselfish individual services rendered in furtherance of the purposes and objects for which the Foundation is formed, and such qualifications as may in the opinion of the Board entitle such persons to an honorary recognition of their efforts and sympathy with the work of the Foundation."



6. The Board of Directors may appoint from their number an Executive Committee and delegate to it any powers of the Board as the Directors may see fit, for administering the Foundation's business and furthering its objectives and purposes.

7. The Board of Directors may appoint other committees for specific purposes not in conflict with the powers of the Board of Directors and the Executive Committee.

8. The Board may, after conferring with three Foundation Consultants, solicit and receive subscriptions of money or property to improve and expand Foundation services to the public.

9. The members of the Board of Directors shall constitute a quorum at any meeting.

10. Annual meetings shall be held the second Tuesday in October in Connecticut, but special meetings may be held wherever and whenever ordered by the President or Board of Directors.

11. No member of the Corporation shall be entitled to share in the distribution of corporate assets upon any dissolution of the Foundation.

Other bylaws concerned standard procedures for incorporated bodies.

### **All Directors Resign; Reappointed**

President Tilden presided at the special February 1936 meeting, and presented resignations of Directors Angell, Benton, Cox, Crum, Daniels, Day, Mrs. Eno, W.P. Eno, Johnson, Kelcey, MacDonald, McClintock, Mendell, Pinchot, Platt, Schley, P.K. Smith, Sprague, Stoeckel, Tilden and Williams—the entire Board. By unanimous resolution the resignations were accepted effective with the close of the meeting.

Officers elected to serve the rest of the year were Mr. Eno, Chairman of the Board; Tilden, President; Stoeckel and Pinchot, Vice Presidents; P.K. Smith, Secretary; Day, Treasurer; and Mrs. Eno, Resident Director.

Former Directors elected to the new Board of Consultants were: first class, Angell, Benton, Cox and Crum; second class, Daniels, Johnson, Kelcey and MacDonald; third class, Mendell, Platt, Schley, Sprague and Williams.

Miss Briody was appointed Assistant Secretary and Assistant Treasurer.

Resolutions authorized the sale of Foundation property in the vicinity of North O, North P and 22nd streets in Washington, D.C., and the purchase of "all or any part of the property of William P. Eno located in Westport and/or Norwalk, Connecticut."

### **Unpublished Tragedy of Auto Accidents**

In March 1936 the Eno Foundation reprinted a 1935 Harper's Magazine article by William J. Cox on "Why Automobile Accidents?"

"One night last fall (September 8, 1934) the *Morro Castle* (passenger steamship) burned," the Eno bulletin began. "A hundred and twenty-five persons lost their lives. For days newspapers were filled with accounts of the tragedy. And while we shuddered over the *Morro Castle*, the great majority of us remained quite unaware that on that very day we killed more people with our automobiles than perished at sea. And the very next day we did it again. In these deaths by motorcars, there was no news."

Another Foundation publication of the year was *How Traffic Regulation May Be Improved in Town and Country*, a supplement to Mr. Eno's previous book, *Simplification of Highway Traffic*.



### **Eno Sees Ominous National Signs**

In the summer of 1936 Mr. Eno wrote to his old German friend Franz Seyffarth: "From what I can learn from the papers and otherwise, I believe Germany has been very wise, especially in regard to getting rid of Communists. There is one thing, however, that I have a complaint about, and that is that so many of them are coming here. We shall, I think, have to copy what you have done."

About the same time Mr. Eno wrote to his French friend, Paris Police Chief Paul Guichard: "I am afraid that they are doing the same kind of thing in France that we have been doing so long in America, removing efficient public servants and replacing them with others who have had no experience as a political move. There are other things that we are doing and that France is doing too, which I think are going to end disastrously if not stopped now."

Also at that time Mr. Eno filed a clipping from *The Rider and Driver* pointing out that the horsemanship publication was still in circulation as originally intended, resisting pressures for a motorized policy. At the beginning of the century and for years afterward, *The Rider and Driver* was continuously the medium through which Mr. Eno introduced the street and highway traffic rules on which many traffic laws are based throughout the world.

### **Directors Solidify New Organization**

Corporation members of the Eno Foundation for Highway Traffic Regulation held their annual meeting on October 13, 1936, at Mr. Eno's Westport home. They ratified all acts, contracts, proceedings, elections and appointments of the Corporation since the last meeting, then unanimously reelected the seven Directors elected at the February special meeting.

Elected as Consultants for 3-year terms were Angell, Benton, Cox and Woodson P. Houghton. R. Randolph Bray was elected to the Honorary Advisory Council.

Immediately after the Corporate membership meeting, the Board of Directors held its fifteenth annual meeting, which was attended by a quorum consisting of Mr. and Mrs. Eno and President Tilden, Acting Secretary.

They reelected all officers.

### **Eno Maintaining Contact Abroad**

Mr. Eno, then 78 years old, did not go to Europe in 1937, but he maintained his overseas contacts.

In February he wrote Seyffarth: "I wish the people of this country knew enough to realize that the real enemy of us all is Communism which your government has done so much to suppress. We are not disinterested in this country, but we do seem to lack perception of what is going on."

Reporting in a letter February 15 to Dr. Octavo Gonzales Roura in Paris on the work of Fritz Malcher, a member of the Eno Honorary Advisory Council, who died in 1933, Mr. Eno said he "was a real genius at traffic problems. For about 2 years he worked with me on Foundation matters. It was a great misfortune that he died, as he had a great talent and an original mind." (Dr. Roura was Docteur en Droit and Sciences Sociales de L'Universite de Buenos Aires, ancien Secrétaire du Tribunal Correctionnel.)

### **Eno Plans to Build Foundation Home**

*The South Norwalk Sentinel* reported on August 24, 1937, that Mr. Eno had transferred a portion of his estate to the Eno Foundation

for Highway Traffic Regulation, Inc., for use in the Foundation's work.

And on November 20 he wrote Dr. Roura from Saugatuck:

*I hope to build the first traffic building next summer on my place here. It will contain, among other things, one room with fireproof vaults to keep the scrapbooks and other valuable data. There will be four small offices and a traffic library.*

*I have over 40 scrapbooks kept since I began the work, and these will be put in the contemplated building where they will remain for consultation and reference. However, the work of going over these books would be so great that few people would do it. This new book [The Story of Highway Traffic Control, 1899-1939, by William P. Eno, published by the Eno Foundation] is to form a short cut in getting at more important features and referring to scrapbooks for greater details when needed.*

The scrapbooks are still secured in the vault of the Eno Foundation's headquarters as Mr. Eno said they would be.

### **Traffic Solutions Take Priority**

Two subjects were on the front burners of Mr. Eno's traffic campaign in the mid-thirties: parking and noise suppression. He told the Women's Safety Committee at an American Automobile Association convention in Washington that "the most vexing question now is the control of the parking 'nuisance.'"

He noted with some satisfaction that excessive motor horn-blowing had been markedly reduced in many cities. Paris and London, nudged by Mr. Eno, "led the way in reducing the exasperating and usually unnecessary use of the motor horn." Italy followed their example after a Rome experiment in silence proved successful. Switzerland made progress in a campaign against horn-blowing; Finland went further and also forbade street bells, traffic whistles, hand organs and the cries of hucksters, newsboys and sidewalk orators. New York City was a late comer in prohibition of unnecessary traffic noise, but was joined by other American cities which observed not only the improved ambience in European tests, but also a lowering of accident rates.

Seyffarth wrote Mr. Eno from Germany in February 1937, "Berlin is progressing fast under Hitler's government. It is even a surprise to me to realize the change."

### **Official Steps for Construction**

Plans of Mr. Eno, mentioned in letters and conversations, to erect a building to house the Eno Foundation were entered into official records of the organization at a special meeting of the Board of Directors at Mr. Eno's Saugatuck residence on July 27, 1937. The Directors confirmed and completed contracts for the transfer of property from Mr. Eno to the Foundation, then authorized Chairman Eno to plan for a building to house records and offices of the Foundation and proceed with construction.

In a letter to the Board, Eno reported, as he had at two previous Directors' meetings, why he "could not continue to do so much detail work," and the reasons had grown stronger. "It seems absolutely necessary not only to relieve me from too much work, but for the interest of the Foundation to employ someone who can relieve me from practically all detail work."

### **Eno Sees His Dream Realized**

In lieu of annual meetings of the Eno Foundation's Corporate members and the Board of Directors in October 1937, special meetings were held on October 14 at Mr. Eno's home in Westport.

The Corporation reelected Chairman Eno, President Tilden, Secretary-Treasurer P.K. Smith, Vice President A. Pinchot, Special Treasurer Day as Directors, and named Burton W. Marsh to succeed Robbins R. Stoeckel, deceased, on the Board. Marsh was Director of the Safety and Traffic Engineering Department of the American Automobile Association with headquarters in Washington, D.C. Pinchot was advanced from Second to First Vice President and was succeeded by Marsh. Miss Briody was reappointed Assistant Secretary and Treasurer.

Although his health had declined, Mr. Eno was ebullient over his traffic conquests when he wrote to Hawley S. Simpson, Vice President of the Institute of Traffic Engineers, in April 1938.

*Beginning work 39 years ago next December reminds me of how lonely I was for many years, but what I hoped would happen has come to pass and the many organizations and individuals now interested in traffic safety and efficiency is a great satisfaction to me, especially the support of the Institute of Traffic Engineers and such other national organizations as the American Automobile Association, the National Safety Council, the Bureau of Traffic Research, and numerous others, all doing good work, which is ample reward for my participation in traffic problems.*

Nine days later, April 20, at a special Board of Directors meeting in New York, Mr. Eno announced that plans for a traffic building for the Foundation had been completed. He outlined proposals for the structure to be located on 14 acres across the road from his Saugatuck home.

A lengthy discussion was held by the Directors on the advisability of transferring all Eno Foundation property to affiliated Yale University, but no action was taken. Attention turned to the sale of Foundation property in Brooklyn, and Secretary-Treasurer P.K. Smith was authorized to set the price and sign documents related to the sale.

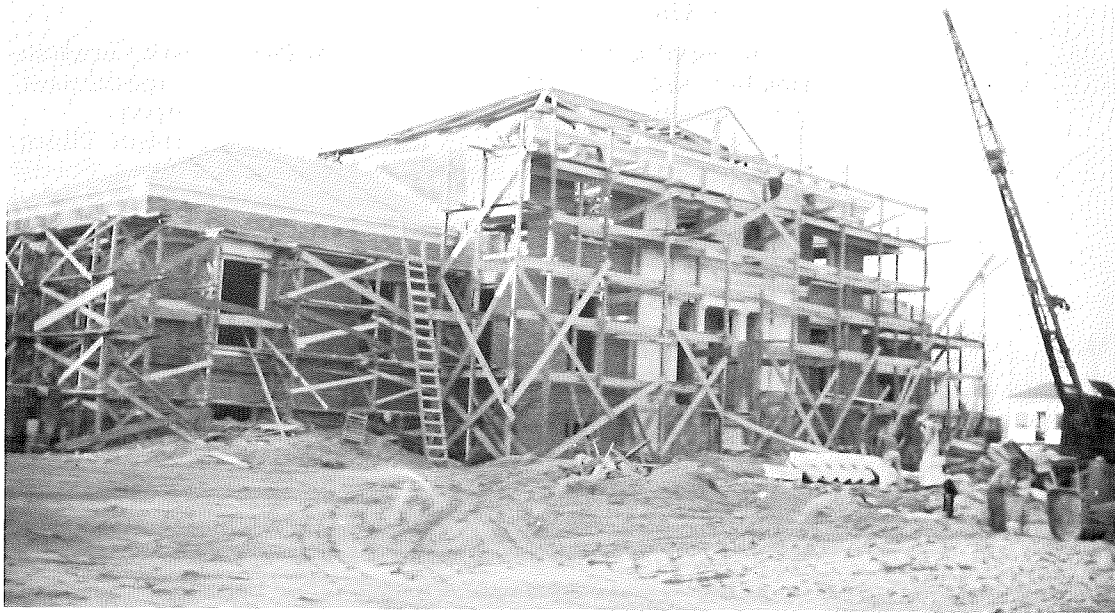
The first public announcement in Mr. Eno's scrapbooks on construction getting under way on the Foundation's new headquarters was an excerpt from the July 1938 Bulletin of the Institute of Traffic Engineers. It said: "A highway safety laboratory will be erected in Saugatuck, Connecticut, by the Eno Foundation through contributions and funds made possible by William P. Eno. Last week (on July 18) the ground was broken for the construction of the first building in the world to be dedicated solely to experiments and developments in highway safety."

### **Cornerstone Laid in Foundation Building**

The cornerstone was laid with minimum ceremony August 29, 1938, attended by staff members of the Eno Foundation and construction people on the project. The crypt contained this letter signed by Mr. Eno:

*I began the study of traffic when I was 9 years old and interest in it has never left me for a day. I commenced active work in December 1899 and have continued since, giving all my time to it.*

*The only recompense I have received has been the hope that it has saved lives and facilitated transportation of people and goods.*



*This box contains my principal writings. Many more have been in pamphlets, magazines and letters.*

*I hope this cornerstone will never be disturbed, but if it is, that the contents of the box will be preserved where it will be accessible to students who may follow me.*

Three months later Mr. Eno wrote a letter to Otis Peabody Swift of the *Life* magazine staff, saying:

“I think you will like the new traffic building which is now under roof. The furnace may be going in tomorrow, thus making it possible to do all inside work before Spring, when it is to be dedicated. The building is strictly Colonial—in other words, good Georgian and simple to the last degree, but I think with excellent proportions.”

### Still Optimistic About Germany

In 1938, World War II was only a year away. Nazi Germany had reincorporated the Saar in 1935, occupied the Rhineland in 1936, and annexed Austria in 1938, 6 months before Britain and France sanctioned German dismemberment of Czechoslovakia. On October 20, 1938, Mr. Eno wrote Franz Seyffarth: “Now that the whole world seems to be in such a mixed-up condition, I wish I could be on the other side and find out just how bad things are. I am strongly of the opinion that Germany can do a splendid job in bringing about general peace and happiness for all.”

In the letter Mr. Eno questioned the correctness of a *New York Times* report that in Germany the police may deflate the tires of reckless automobiles drivers. He added the comment, “It seems to me an excellent idea.” The former German traffic Major replied that *The Times* report was indeed true. Furthermore, offenders had to attend safety and driving classes at Police Headquarters for a couple of hours before returning to their cars. Seyffarth continued:

*We are getting more and more cars very fast on account of the growing prosperity. The marvelous roads Hitler is building make driving more and more attractive. We have to look ahead and give traffic education a proper place.*

*So far as to traffic. As to the political outlook I think that there is*

*Eno office building under construction in 1938.*



*Mr. and Mrs. William P. Eno, Charles Tilden and a workman lay the cornerstone of the headquarters building of the Eno Foundation, August 29, 1938.*



*German police sometimes deflated the tires of reckless automobile drivers.*

*a good prospect that general peace is brought about by Mr. Chamberlain, if only he can continue his policy long enough, which he started by introducing confidence and good will into his affairs with Mr. Hitler. Chamberlain and Daladier were the first statesmen in 20 years who no longer refused to take steps for the rightings of wrongs admitted by everybody.*

When Mr. Eno replied on November 5, 1938, his friend had been promoted to the equivalent of Chief of Police and was addressed as "Kommandeur." "I think you and I agree on the political outlook," Mr. Eno wrote. "No nation wants war but many of them are afraid some other nation does and they will not reduce armament until that idea is laid aside. I doubt if any quarrel between two persons or two nations has ever occurred when all the fault was on one side, and so it depends mostly on whether the opposing side can approach the matter with an open mind and sympathy for the other side."

A more perceptive voice on the impending war came from Hon. Rupert Mitford of England who addressed Mr. Eno as "Dear Billy" in a letter dated October 28, 1938.

*Of course by now the excitement over the crisis has died down, perhaps too much so, as, after all, we are going to be forced again and again by demands from the dictators every time they feel their force waning.*

*I am afraid that I am not amongst those people who feel they can trust Hitler. Already tonight the wireless tells of announcements that Germany will not be satisfied with the giving up of African colonies by smaller states such as Portugal and Belgium, but will insist on the return of her late colonies in full. Of course, the reverse of the coin is that South Africa, Kenya, Rhodesia, etc., are not going to stand for the establishment of Fascist attack fronts on their*

*borders and are demanding in no uncertain terms that the British government declare their policy in order to restore confidence.*

*This will be a new test for Chamberlain and I only hope that when the pistol is put to his head he will feel himself stronger than he did at Munich and Gotesburg.*

“Now as to Hitler,” Mr. Eno replied on November 4, “no one can trust him if he is crazy, but we have simply got to trust him for the present and to let him understand that we do. When, if ever, we are through with the present crisis, we should not be caught again unprepared.”

He continued, “I believe Mussolini can be trusted. However, the greatest danger of all is Russia, and a great deal of the opposition to Fascism and Naziism in this country has been due to Russian propaganda to put us on a false trail.”

Concurrently, Mr. Eno received a Japanese viewpoint from his traffic-interested friend, Nagatoshi Fujioka, Governor of Kagawa Prefecture. “To speak about the China problem,” Fujioka said, “it is getting more and more important in this country, and it is no doubt that Japan has no degree of antagonism against whatever country in the world, but the only thing that she is intending to carry out by putting almost all efforts for this war is to eliminate the Communist influence and power out of the Far East. This work I am sure to believe, will by and by be realized by the world, and accomplished by us at an earliest possible date.”

#### **Name Change: To ‘Traffic Control’**

A significant landmark in the Eno history occurred at a special meeting of the Foundation’s Corporate membership on July 18, 1938, when the name was changed from Eno Foundation for Highway Traffic Regulation, Inc., to Eno Foundation for Highway Traffic Control, Inc.

While being shortened by two syllables, the name more accurately portrayed the broadened scope of the Foundation’s activities and projections. It also was more appropriate to the inscription spanning the main entrance of the rising Eno Foundation building: “For Traffic Control!” At the annual meeting of Corporation members of the Foundation on October 11, 1938, at Westport, Mr. and Mrs. Eno and Directors Day, Marsh, Pinchot, P.K. Smith and Tilden were reelected to the Board of Directors.

The annual meeting of the Board of Directors followed immediately and all officers were reelected. Persons elected to the Board of Consultants were: Dean Johnson, Kelcey, MacDonald, McClintock and Mrs. George C. (Cora Wells) Thorpe, Chairman of the Women’s Safety Committee of the District of Columbia Motor Club of the American Automobile Association. Elected to the Honorary Advisory Council were Ward Brown, architect for the new Foundation building; William H. Cameron; W.P. Hutchinson; A.S. Keeler of the United States Trust Company in New York; Mrs. Clark Minor; and Charles Seymour, President of Yale University. Mrs. Minor, the former Alice C. Archibald, was the wife of the Chairman of the Executive Committee of the International General Electric Company, New York.

At a special meeting of the Board of Directors at the Eno Saugatuck residence on December 15, 1938, Dr. Seymour was elected to the Board of Consultants to succeed the late Henry Platt, former director who died on October 11. A resolution on the death of Mr. Platt was adopted. William Eno DeBuys, a relative of the first Mrs. W.P. (Alice



*The inscription over the entrance to the Eno Foundation building reflected the new name of the Foundation, changed in 1938 to better reflect the broadened scope of the Foundation’s activities.*





*Completed Eno Foundation building shortly after construction.*

Averill) Eno, and Mrs. Amos Eno were elected to the Honorary Advisory Council.

### **Foundation Building Finished**

The year 1939 brought completion of the handsome new permanent headquarters of the Eno Foundation for Highway Traffic Control, but many other related developments were negative.

Mr. Eno's debilitating illness caused him to cancel plans for the building's dedication ceremony. (The formality was never observed.) It also forced him to give up his home in Washington and his 35-year campaign to straighten out the traffic mess in the nation's capital. Despite the condition of his health, he completed his sixth book, *The History of Highway Traffic Control*. During that year Mr. Eno and his colleagues were saddened by the deaths of three of the most colorful characters in the Foundation's array of official talent.

### **Veteran of Custer's Battles**

Major Charles A. Benton of the Board of Directors died March 15, 1939, at the age of 91 at his New York home after a year's illness. He missed the 1876 Little Big Horn River massacre of General George Custer and all 208 of his men only because he lay in the hospital at Fort Keough recuperating from a skull wound he received in a battle with Indians. Major Benton ran away from school at 17 and enlisted in the Union Army for service under General Philip Henry Sheridan in the Civil War. He was the messenger who carried dispatches to Washington after the Battle of Cedar Creek in Virginia's Shenandoah Valley, using four relays of horses. Mustered out on his eighteenth birthday, he reenlisted 2 years later and was sent to Florida to stop customs violations. Commissioned in 1869, he fought in Indian campaigns that made Custer famous.

He was fluent in French and Spanish and represented the United

States on foreign assignments. While returning from Madrid in 1880 he met Thomas A. Edison on shipboard and was persuaded to resign from the army and join the Edison organization.

Major Benton helped install one of the world's earliest and most successful electric street railways in Richmond, Virginia, which opened in 1888. He later participated in development of the electric elevator.

He and Mr. Eno worked together on the development of mounted police and the solution of traffic problems early in the century and formed a lasting friendship. Mr. Eno entertained Major Benton at his Saugatuck home and aboard his steam yacht, *Aquilo*.

### **Mr. Eno's Scotland Yard Partner**

Exactly a week after Major Benton's death, Frank Elliott, a member of the Eno Foundation's Honorary Advisory Council, died at the age of 64. For 17 years as Assistant Commissioner of Scotland Yard he was London's road traffic manager. Working closely with Mr. Eno on traffic plans, he introduced London's system of one-way streets and the roundabout known in the United States as the traffic circle. He took over the traffic position in 1914, when he transferred from the home office, and worked at that job until his retirement in 1931. In order to study traffic firsthand he rode a bicycle to work at Scotland Yard every day from his home in Wimbledon.

Later in 1939, on November 7, Burgomaster Max of Brussels, a member of the Eno Council and hero of World War I, died at the age of 69.

### **Illness Limits Eno's Activities**

The Board of Directors in 1939 met in April once and in December three times in addition to the annual meeting in October. All meetings took place at Mr. Eno's Saugatuck home except the one on December 30, which was held in Mr. Eno's apartment in the Plaza Hotel in Manhattan, where he was recuperating from an illness that began July 4 of that year.

He was hospitalized 6 weeks in July and August. In September he was unable to write and had his secretary sign the letters he dictated, but he continued to work on closing out his book on *The Story of Highway Traffic Control* published by the Eno Foundation for Highway Traffic Control (1939). He felt better in November and planned to motor South on a vacation, but the illness forced him to stay home all winter.

### **The Big Issue Is Finances**

Although completion of the new headquarters for the Eno Foundation was the big news of 1939 in the history of the organization and Mr. Eno's traffic career, it was not mentioned in the official minutes of the meetings of the year. The big issue was finances, particularly as they concerned relations between the Foundation and its founder.

Purposes and plans of the Foundation were liberalized by a Board resolution authorizing the Corporation to use all or any part of its funds and facilities for such educational and scientific purposes that a majority of the Board of Directors might choose for benefit and usefulness to the public.

### **Tilden Also Managing Director**

All officers and directors were reelected and President Tilden retired from his Yale professorship to receive the additional title and duties of Managing Director. "Professor Charles J. Tilden, President





*This aerial view of the Eno estate shows the proximity of the new office building to Mr. Eno's home near the water.*

of the Eno Foundation, is in direct charge of the work here," Mr. Eno told correspondents.

T. Elmer Transeau, Director of the Bureau of Highway Safety for the Commonwealth of Pennsylvania, was elected to a 3-year term on the Board of Consultants along with Cameron, Goetz and Seymour. At the same time, Judge J. Kenneth Bradley, 36, was elected to the Honorary Advisory Council. An academic and law graduate of Columbia University in New York City, he was Judge of the Westport Town Court, 1931-1937, and National Chairman of Young Republicans, 1935-1937. He practiced law in Hartford, Connecticut.

### **A World at War**

Events of the Eno Foundation in 1939 were taking place in a world of turmoil. Germany and Italy formed a military alliance in May. Germany and Russia signed a 10-year non-aggression treaty in August, and both invaded Poland the next month, setting off World War II. Before September ended, Australia, Britain, Canada, France, New Zealand and South Africa declared war on Germany. Japan pushed farther inland in the second year of its invasion of China. And in the United States President Franklin D. Roosevelt proclaimed a limited national emergency.

On June 30 Mr. Eno wrote Dr. Shigeru Matsui in Tokyo: "The world troubles I feel sure are largely due to misunderstanding and one cannot believe but only a small portion of what one reads in the newspapers. My acquaintance with my good friends in Japan leads me to believe that most of it is not true and I hope that misunderstandings will soon be swept aside and that I shall see more of the many things which for years made me an admirer of Japan."

And Mr. Fujioka wrote Mr. Eno from Japan on August 10, 1939: "At the time of the China conflict, I regret to know that your country informed us of the abrogation of the America-Japanese Treaty of Commerce and Navigation. But I believe that the authorities of the two countries will examine the matter carefully and will restore better comity than before between the two countries before long."

Sir Hugh Turnbull wrote the perceptive from London on September 18: "This sudden immersion in war is a great tragedy, and one cannot quite see the end of it all, especially now that the Russians have taken it into their hands to come down on Poland in conjunction with the Germans."

### **Eno Watches Building Rise**

For the first half of 1939 Mr. Eno watched the construction of the Eno Foundation permanent headquarters, most of the time from the comfort of his home. The new building, he pointed out to a friend, "is on the same axis as my home, but across the road. My house to the road is about 300 feet and the building stands 125 feet on the other side. It is in plain view of the windows of my study."

After long consideration, Mr. Eno definitely decided early in 1938 to begin operations on the building to be dedicated to traffic control. In his 1939 book, *The Story of Highway Traffic Control*, he wrote:

*The building is located opposite my place in Saugatuck, Fairfield County, Connecticut, across the highway from my house, on land transferred by me in 1937 where the work will be under my supervision as long as I live. It is on a direct route between New York, where I began my work, and my alma mater, Yale University, New Haven, Connecticut.*

*The work of the Foundation is similar to the work of some of our other organizations such as our hospitals, our Red Cross, etc., but unlike these, its purpose is to prevent disaster rather than to alleviate the distress after disaster has occurred.*

### **Foundation's Permanent Headquarters**

Designed in dignified Colonial-Georgian style, the Eno Foundation building is centered on a spacious, forest-fringed greensward in a campus-like setting. The two-story central section of the red brick structure thrusts forward to the front steps, featuring decorative and utilitarian sandstone components. Under its gable roof is the circular seal of the Foundation with its Latin inscription meaning, "Order out of chaos." On the sandstone beam atop the four columns of the entrance portico are words, "For Highway Traffic Control." Symmetrical single-story wings flank the box-shaped center section. The building is fireproofed and covered with a slate roof. It measures 110 by 60 feet and is 35 feet high.

The wide foyer has offices on the left and right and forms a vertical line of a T. At the head of the T is the reception office. The hall to the right enters a large conference chamber that duplicates the great room in W.P. Eno's three-story brick mansion in Washington, D.C. The left hall leads to two other executive offices, a duplicating and resource room, and vaults to secure records of the Foundation.

A marble stairway with patterned iron and brass railings leads to the second floor that contains two offices and a library featuring Eno Foundation publications, including books and pamphlets written by the Founder.

Both floors have high ceilings, oak and marble floors, and spacious windows. All the rooms are beautifully decorated with exotic rugs and period furniture collected by the Enos. Oil paintings and tapestries adorn the walls. The dominant painting in the conference chamber is a lifesize portrait of Alice, Mr. Eno's first wife, who died in 1911. Contrasting squares of marble form the hallway floors.

The below grade level, also reached by a marble stairway, has space for utilities, storage, restrooms, a dining room and kitchen.



*Entrance and connecting hallways inside the Eno Foundation building provide a view of the marble floors, painting and furnishings that decorate the building's interior.*



### **The Artist, the Architect**

Much credit for the building's artistic interior decoration goes to the second Mrs. Eno, the former Alberta Averill Paz, a well known art lecturer and restorer. Some of her finest murals are seen in prominent Washington homes. In the winter of 1937, a 2-week exhibition of her work was held at the Studio Guild in New York. The paintings were later placed on the museum circuit and displayed in major cities throughout the United States.

Plans for the Eno Foundation headquarters were drawn by Ward Brown, a personal friend who worked with Mr. Eno on traffic designs. The architect received his education at Armour Institute of Technology in Chicago, followed by 2 years of study in France. For 25 years prior to the Eno project he had been practicing his profession in and around Washington, D.C. He designed residences for Congresswoman Ruth Hanna McCormick, Secretary of State Dean Acheson, and Senator Joseph F. Guffey of Pennsylvania. He was also architect for the Austrian Legation and the Dominican Republic in Washington. His Eno Foundation building at Saugatuck has a marked resemblance to the Simsbury, Connecticut, Town Hall, which was a gift from Mr. Eno's sister, Antoinette (Mrs. Charles Boughton Wood), honoring their parents.



## CHAPTER 14

# The Noise and Tragedy of Traffic and War

War or no war, Mr. Eno observed with satisfaction and pride in 1940 that all European countries were controlling traffic noise.

He reminisced over the campaign he launched in 1920 against excessive horn-blowing and other unnecessary and irritating street and highway sounds. He noted as early as 1913 that continuous horn-blowing in Paris was “nerve wracking,” and after World War I that the city was “the noisiest capital in Europe.” It followed naturally that he chose Paris, his favorite city, for concentration of his anti-noise crusade, and the city became the first to prohibit the cacophony of the loud, shrill Klaxon horns. That was in 1932, the same year London disallowed non-emergency automobile horn-blowing. Italy followed in 1935.

### Especially Pleased With Italy

Mr. Eno expressed particular joy over lowering the decibel level in Italy. Pleased with the way Premier Mussolini had adopted the Eno “Rules of the Road,” Mr. Eno said in 1933: “There is one thing, however, which wants to be changed and that is the noise of automobile horns, which is terrible, perhaps even worse than in New York and in Washington.” Paris and London suppressed horn-blowing at night, but prohibition of horn-blowing day and night was first enforced in the Champs Elysees, famous thoroughfare in the French capital. Italy nationalized such action.

Some results were unexpected. Ending the exasperation of raucous horn-blowing, Mr. Eno said, “has not increased accidents, but from what we can learn has reduced them. It has made drivers more careful and pedestrians more considerate.”

### How Horn-Blowing Began

The internationally renowned French writer, Abbe Ernest Dimnet, explained “the driver’s efforts to drown out the other fellow’s noise” thus:

*The root of the evil lies in the fact that in the earliest years of automobiling the horn was regarded in this country (France) as the guaranty of security. The code de la route specifies it; motorists are enjoined to use their Klaxon at every turning of the road and, until recently, were frequently fined for not doing so, even at a slight bend of the road! Gradually the French have been led to imagine that safety for the motorist as well as for the pedestrian lay in tooting, and the louder you toot the safer you are.*

As evidence that "nothing is farther from the truth," he cited "the splendid Italian reform" which "reduced accidents from 174 per month in Rome to 72."

In an appearance before the American Club of Paris in 1935, Mr. Eno raised sentiment against reckless use of the automobile horn to such a fever pitch that the members voted unanimously for total abolition of the noise makers. In that address Mr. Eno, always the modest advocate, declared, "I have often been called a traffic expert, though I do not aspire to that title. I am, however, a traffic student of 36 years."

(He was mighty proud, however, when the Institute of Transportation Engineers referred to him as the first traffic engineer, a professional designation that did not gain credence until late in the first quarter of the twentieth century.)

### **Noise as Bad as Germs**

William Lyon Phelps, the widely quoted Yale professor, acknowledging fruits of Eno efforts to reduce traffic noise in the cities, said: "Unnecessary noise has become such a curse in modern life that its effect on the public health is about equal to that of the distribution of germs"

Mr. Eno was originally elected a Knight in the French Legion of Honor for his leadership in traffic control in Paris, but he was promoted to officer rank in 1936 specifically in recognition of his aid in suppressing Paris street noises.

His campaign was contagious. Zurich, Switzerland, declared a "Silence Week" that decreased the accident rate. Finland silenced not only motor horns, but also streetcar bells, traffic whistles, hand organs and the cries of hucksters, newsboys and sidewalk orators. New York hopped on the bandwagon. Mayor Fiorello LaGuardia decreed noiseless nights in the New York City streets in October 1935, followed by an extension to noiseless days, setting the momentum for lowering the level of traffic sound. The October experiment cut the accident rate in Manhattan by 22.5 percent.

### **Foundation's Policy on Noise**

Success against noise in traffic encouraged Mr. Eno to extend his campaign to include noise in the air and on the water. He incorporated these goals in the program of the Eno Foundation. "The Foundation," he said, "is intended to take up the subject of noise on land, in the air and on the sea. The most difficult thing to do will be the reduction of noise in the air on account of the unavoidable noise caused by the propeller (of the airplane), but the engines can be silenced, I think, and planes obliged to maintain a greater altitude."

He also recognized the difficulty of surveillance on water. He recalled that a Connecticut harbormaster "was paid so little that he could not afford gasoline necessary to chase the law offenders."

### **Quiet on the Eno Front, Too**

Traffic was quieter on the streets of cities, foreign and domestic. The American home front, gearing up for probable involvement in the war in Europe, shifted to a preparatory status, neglecting many of the things most important to a civilian peacetime economy. Road and bridge construction was put on hold. Directors of the Eno Foundation for Highway Traffic Control held only one meeting in 1940.

Members of the Corporation held two meetings. At the first, August 14, all seven members except Marsh were present. President Tilden presided and Secretary Philip Smith kept the minutes. Others in attendance were Day, Mrs. Eno, Mr. Eno and A. Pinchot.

On recommendation of President Tilden, the members unanimously passed resolutions (1) to amend the Articles of Association to permit educational and scientific enterprises to carry out the Foundation's program, (2) forbidding the Foundation from participating in activities attempting to influence legislation, and (3) saying that no members of the organization should receive compensation from the treasurer except for reasonable pay for services supporting purposes of the Foundation. No mention was given in the minutes of what prompted the resolution.

At the second meeting of the members held on October 8, 1940, all Directors were reelected except Marsh, who stepped aside to make way for the appointment of Colonel Robert C.F. Goetz. Goetz was elected Second Vice President to succeed Marsh, and was destined to succeed Mr. Eno as head of the Foundation. All other officers were reelected and Miss Briody was appointed Assistant Secretary and Treasurer.

Mr. Marsh was transferred to the Board of Consultants and later became a member of the Honorary Advisory Council, continuing a lifetime interest in the Foundation. He was a pioneer municipal traffic engineer and among the most eminent transportation authorities in America.

Born January 9, 1898, in Worcester, Massachusetts, Marsh received a Bachelor's degree in Civil Engineering from Worcester Polytechnic Institute in 1920 and had a year's postgraduate work at Yale. For the next 3 years he was engaged in housing projects, city planning, zoning, and traffic planning in various cities, including Worcester; Norfolk, Virginia, and Dayton, Ohio. He was City Traffic Engineer of Pittsburgh, 1924-30, and Philadelphia, 1930-33. When he joined the Eno Board of Directors as Second Vice President in 1937 he was Director of the Traffic Engineering and Safety Department of the American Automobile Association, 1933-64.

He stepped up to Executive Director of the AAA Foundation for Traffic Safety, 1964-66. He was a Traffic Engineer, 1967-70, and a Consulting Engineer from 1970 until 1982 when he lightened his work schedule at the age of 84. Besides being a practicing engineer he was a lecturer, instructor and dean of traffic courses at Yale, Harvard, Northwestern, Penn State and the University of Maryland. He was chairman of the Transportation Research Board of the National Academy of Science, the National Academy of Engineers, the National Committee for Uniform Traffic Laws and Ordinances, and the National Committee on Uniform Traffic Control Devices. He was a founder and President of the Institute of Transportation Engineers.

Mr. Marsh was also an American delegate to Pan American Highway Congresses in 1957, Panama City; 1960, Bogota, Colombia; 1963, Washington, D.C.; 1967, Montevideo, Uruguay; 1971, Quito, Ecuador; and 1975, San Jose, Costa Rica. He received a number of the world's most prestigious awards in the engineering profession.

Treasurer Philip Smith brought up the question at the 1940 annual meeting of the desirability of applying for abatement of taxes on buildings and grounds of the Foundation. Documents asking the town of Westport for the exemption were drawn up by Judge Bradley of the Board of Consultants. A special committee, appointed to consider the proposal, decided, on recommendation of Mr. Eno, not to apply.

The following were elected to the Board of Consultants: For 1 year, Cox to succeed Johnson, deceased; 2 years, Prof. Kent T. Healy to fill out the unexpired term of Colonel Goetz; 3 years, Bradley, Houghton, Marsh and Judge Paul Miller.

## Foundation Fetes Yale Staff

Mr. Eno's health improved enough in November 1940 for him to attend a beefsteak luncheon cooked by Guy Kelcey of the Board of Consultants. Staff members of the Bureau of Street Traffic Research at Yale University were guests of the Eno Foundation at the Foundation headquarters. The purpose was to develop a closer relationship and provide the visitors with an opportunity to learn more about Foundation activities.

Speaking of the congestion in cities despite all the improvements in traffic control, C.T. McGavin of Yale said that "examination will reveal that even with our automobile of today, the overall time lapse between starting point and intended destination in most cities is but little different than was possible in the horse-and-buggy days."

## First Eno Casualty of World War II

The first casualty of World War II directly affecting the Eno Foundation occurred on December 1, 1940, when Jean Chiappe of France was killed in an aerial encounter. Recently appointed High Commissioner in Syria, he was aboard a plane flying from Vichy to Beirut, Lebanon. Premier Pierre Laval's department issued a communique that "while over the Mediterranean, the airplane carrying M. Chiappe was machine-gunned in full flight by a British pursuit plane." *The New York Times* confirmed that the plane was downed when it flew through "barrages at a point where a naval action was fought between British and Italian ships."

Monsieur Chiappe was Paris Prefect of Police when he met Mr. Eno in 1927. He was responsible for putting the Eno Rond Point rotary traffic plan into effect on the Champs Elysees. Mr. Eno made 18 references to him in his 1939 book, *The Story of Highway Traffic Control*.

A legend in his own country, M. Chiappe served as Chief of the French Secret Service, President of the Paris Municipal Council, and a member of the French Chamber of Deputies. His record of discipline as a Police Chief led to his appointment by the Vichy authorities for the delicate task in French-mandated Syria and Lebanon. As a strict controller of Socialist and Communist demonstrators in Paris he was held in contempt by Leftist parties, but was "the Idol of the Masses." In 1935 he fought a pistol duel with his predecessor as President of Municipal Council, Pierre Godin, wounding him slightly. A native of Corsica, M. Chiappe died at the age of 62.

## Other Wartime Reflections

Through the early gloom of the Western Allies in World War II came this optimistic note to Mr. Eno from Gilbert Carmichael, an Honorary Eno Councilor and Assistant Secretary of New Scotland Yard in London, dated January 5, 1941: "In the difficult and anxious times through which we are passing, it is good to know that we have the sympathy and understanding of our friends in the United States. The voice of your President (Franklin D. Roosevelt) coming to us on the radio gives fresh hope and confidence for the future, when, surely, the English-speaking people will come together as never before."

Mr. Eno recommended a wartime measure of a maximum speed of 35 miles per hour outside city limits and 25 miles in cities to conserve gasoline. Citing the comparative importance of safety in traffic, he pointed out that for every person killed in Europe by enemy action since the war began, two had lost their lives in highway accidents.





*Eno donated one of his prize horses, "Chiron," to New York City's mounted police. After receiving the animal, it was christened "Eno" and served in active duty from 1931 to 1939, when it was retired.*

### **Safety Students Thank Mr. Eno**

As the climax to a traffic safety campaign conducted by young people at nearby Bridgeport, Connecticut, the Eno Foundation sponsored a simple ceremony in the Foundation headquarters. The Warren Harding High School Junior Traffic Commission staged a short play, after which the students presented to Mr. Eno a book they had compiled based on Eno traffic principles.

### **President Tilden's Last Meeting**

Only one meeting of the Eno Board of Directors was held in 1941, and that was the annual October gathering. Everything seemed to be harmonious. The Directors ratified the sale of 23-18 Ditmars Boulevard in Astoria, Long Island, and decided to make a change in the Corporation's custodian account. Then they reelected all officers and consultants.

The Chairman of the meeting was Charles J. Tilden, who had served as President of the Foundation since 1931 and resigned his professorship at Yale to be full-time Managing Director the last 2 years of his service. This was the last Eno Directors' meeting he would ever attend.

### **The Departure of President Tilden**

Except for Mr. Eno's traumatic remark in a 1942 letter about "all the calamities that have come to me and the Foundation lately," there is no hint in the Eno Foundation records, either in the minutes of

meetings or the Founder's scrapbooks, about why President Tilden left the organization. He had been an alter ego of Mr. Eno in promoting the welfare of the Foundation until, as far as the documents show, he dropped out of sight.

People who were aware of the situation say that a rift began when Katherine Myers Tilden, President Tilden's wife of 38 years, suffered a lingering illness that detracted him from his Foundation work. After she died March 8, 1940, Mr. Tilden was absent for long periods of international travel. The state of affairs was complicated, apparently, by staff disagreements in which he did not prevail. After retiring from the presidency for whatever cause, he continued his extensive tours. During one of the trips he met Linda Palmer Littlejohn of Sydney, Australia, and they were married on April 6, 1942. He died 17 years later at the age of 86.

## CHAPTER 15

# Vision of Interstates

The origin of the present Interstate Highway System was the report *Toll Roads and Free Roads* prepared by the U.S. Bureau of Public Roads in cooperation with the state highway departments and presented to Congress in 1939. Prior to this, a few parkways in the United States and the German autobahn had demonstrated the virtues of controlled access highways with grade-separated interchanges.

In the 1930s Mr. Eno shared a vision of a national network of superhighways. This system would provide protection for the United States from military invasion by sea or air or by hostile forces landing in Mexico or Canada.

Adoption of the idea was advocated by the Automobile Old Timers, an organization of American motorcar pioneers. The President, George Conrad Diehl, pointed out that national highways could be considered “both from the urgent war viewpoint, and as necessary for the peacetime economy. In the present emergency, war needs must be considered.” He asked, in behalf of the Automobile Old Timers and the National Highways Council, that Mr. Eno appeal for an opinion from the military head of American Armed Forces. He thought the military leader’s pronouncement on the subject would be controlling.

So Mr. Eno wrote to General George C. Marshall, Chief of Staff, requesting his support for the proposal. “For complete coordination of our land, sea and air forces,” Mr. Eno said, “a system of military highways would be required. These roads must be adequate to transport to our borders in the shortest possible time hundreds of thousands of armed men, and carry the heaviest equipment of tanks, armament and materials.” He offered the backing of the Eno Foundation for Highway Traffic Control, especially in arousing public opinion to secure the necessary legislation.

The letter to General Marshall was referred to Frederick C. Horner, Chief of the Highway Division, Services of Supply Officer of the Chief of Transportation, the War Department. His reply was that the Eno recommendation would receive attention. The matter arose too late to be helpful in World War II, but the concept was kept alive. What the pioneers envisioned is recognized today in the virtual completion of the National System of Interstate and Defense Highways. This network did more than anything else to unify traffic regulations throughout the states, a goal which Mr. Eno sought for many years.

### Canal Purchase Engineer Dies

The Eno Foundation lost a friend on May 19, 1940, when Colonel Philippe Jean Bunau-Varilla, the French engineer who delivered the Panama Canal project to the United States, died at the age of 80. He never fully regained good health after injuries he received in World War I, which necessitated amputation of his right leg. Mr.

Bunau-Varilla was a member of the Honorary Advisory Council of the Eno Foundation. He and Mr. Eno had exchanged visits since they first became friends in 1903.

### **Good Omens in a Bad War**

As early as 1942, 3 years before World War II ended, bright spots began to appear on the Allied side of the dark clouds of conflict. Henry P. Maybury, Consulting Engineer for the Ministry of Transport in London, and an Eno Foundation advisor, wrote to Mr. Eno from his home in Shropshire, England, saying: "Since 1939 we in this country have had a most anxious time, but now that we are assured of the wholehearted assistance of your great nation the issue can never be in doubt. Victory may be somewhat delayed, but that we shall come through satisfactorily is now assured, and we enter the year 1942 in a spirit of sober confidence."

### **Board Meets Without President**

The first meeting of the Board of Directors after President Tilden's departure was specially called at Mr. Eno's Saugatuck residence on September 29, 1942. Chairman Eno presided.

Present by invitation were Courtland Kelsey of the New York law firm of Simpson, Thacher and Bartlett, and Charles M. Upham, engineer, both of whom were to become active as Eno Directors.

A resolution was passed to appropriate \$20,000 out of net income to be paid to Yale for purposes approved by the Eno Foundation.

Mr. Eno was evidently happy over the meeting. The next day he wrote to George Day of Yale, the Eno Foundation's Special Treasurer, referring to the Institute of Traffic (now Transportation) Engineers ("of which I am the first honorary member") and saying: "This is the best organization on traffic that there is. It gives me credit of being the first traffic engineer in our country. Such did not exist by name until this organization was formed in 1929 and its makeup consists of most of the best traffic men in the country."

He suggested that Yale give the \$20,000 Eno Foundation grant to the ITE to be used in rotary traffic promotion. Yale accepted the recommendation.

### **Pinchot Is New Eno President**

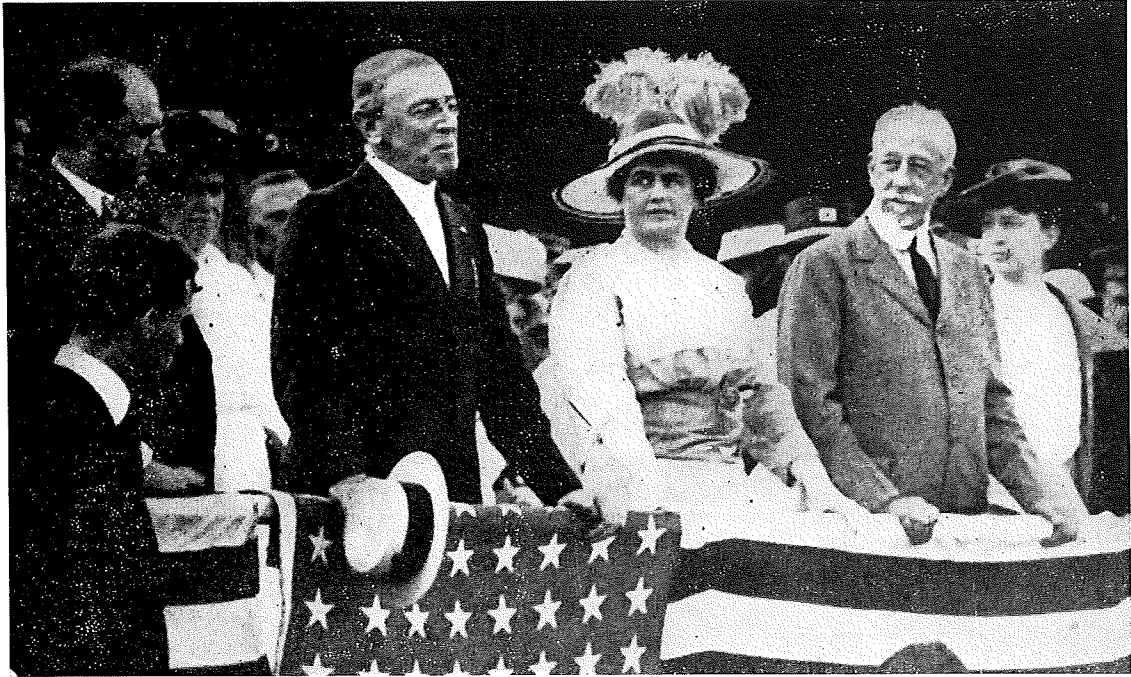
Members of the Eno Foundation for Highway Traffic Control held their annual meeting October 13, 1942, at Mr. Eno's Saugatuck residence and elected Courtland Kelsey to fill Tilden's vacancy on the Board of Directors. Other members, reelected, were: Day, Mr. and Mrs. Eno, Goetz, Pinchot and P.K. Smith.

Amos R.E. Pinchot, Mr. Eno's nephew, was elevated from First Vice President to succeed Tilden as President. Goetz moved up to First Vice President, being succeeded as Second Vice President by Kelsey.

Charles Upham and Tyrell P. Shertzer, who were to become active members of the Eno organization, were invited guests.

President Pinchot, suffering declining health, attended no Eno Board meetings after his election. He died in 1944 at the age of 71.

Resignations from the Board of Consultants were received from Cox, Healy, Kelcey and McClintock. Elected as Consultants were: for 3 years, William H. Cameron, Roger Morrison, Charles Seymour, Hawley Simpson and T.E. Transeau; for 2 years, Edgar F. Copell, T.B. Shertzer, and Arnold H. Vey. Alternates for places on the Consultant Board were selected in this order: Hal G. Sours, Dean Steinberg, Wilbur S. Smith, D. Grant Mickle, Carl E. Fritts, William Eno DeBuys and S.W. Taylor.



*As organizer and director of the Home Defense League of the District of Columbia in the first World War, Mr. Eno was given an engraved testimonial for service to the United States Council of National Defense signed by the Secretaries of War, Navy, Interior, Agriculture, Commerce and Labor; also the Council Director; in the picture are left, Louis R. Brownlow, Chairman, Board of Commissioners of the District of Columbia, Miss Mabel T. Boardman, representing the American Red Cross, President Wilson, Mrs. Wilson, William P. Eno, Mrs. Newton D. Baker, wife of the Secretary of War.*

Shertzer was authorized to represent the Foundation at the National Safety Council's convention in Chicago the following month.

### **Parking Problem Predominates**

Mr. Eno and the Foundation continued concentration on the parking problem, and in January 1943 published 17 conclusions and four essentials of a program that has borne the changes of the years.

The conclusions:

1. No study of parking problems that fails to consider possible future developments and needs is worth the time and expense involved.
2. Parking problems will never be solved at the curb or the center of the street.
3. Meters are a palliative, an aid to controlling curb parking, not a solution.
4. Off-street parking and terminal facilities must be provided for all vehicles other than those which stop momentarily to discharge or pick up passengers.
5. Mass transport vehicles must be encouraged and everything possible done to expedite their movement and encourage their usage.
6. Provisions must be made off street for all pick-up and delivery services in business districts.
7. Streets must be cleared of all unnecessary obstructions such as parked vehicles.
8. The provision of parking facilities is coming to be as much a public responsibility as the provision for the safe and rapid movement of vehicles. Business firms that derive a large part of their income from motorists should be required to furnish reasonable off-street parking spaces for their patrons.
9. Permanence and continuity of off-street parking facilities can be assured only through municipal or other public ownership.
10. Free parking must be provided for a reasonable length of time.

11. All-day parkers should park off streets.
12. All-night on-street parking should be regulated by police.
13. When land values exceed a certain cost per square foot, the multiple deck, open-air garage may be the cheapest form of parking facility.
14. Parking meters and parking lots or garages operated by municipalities should not be considered as sources of additional income.
15. Police salaries or traffic regulation costs should not be paid out of receipts from parking meters or off-street facilities, except in proportion to the time and effort devoted to the parking regulations.
16. All parking regulations should be enforced impartially and continuously.
17. People must be made aware that the parking problem affects everybody, that the advantages of modern motor transportation loses its value unless adequate off-street facilities are provided, and that they must overcome self-interest and cooperate for the welfare of the community and themselves. This can be done through education.

Essentials of the problem:

1. The volume of heavy traffic concentrated in a business district constitutes a brake on business unless facilities for parking are provided in the immediate neighborhood.
2. Adequate facilities are necessary if the district is to reap advantages incidental to the volume of traffic.
3. What are the real and potential costs to the municipality, the taxpayers and the business people of the lack of proper and adequate space?
4. The problem is one in which the municipal and planning authorities are placed in a position of trying to effect a balance between the interests and welfare of the businesspeople, the motorists, and the city as a whole. This is made difficult because a large part of the population cannot appreciate the fact that their interests are involved.

### **Eno Detests Politics**

Mr. Eno was indignant in February 1943 when his friend and Foundation associate, Judge Paul Miller, was ousted as Judge of the Bridgeport City Court because of partisan politics in the Governor's office. In a letter to *The Bridgeport News* regretting that "the turn of the political wheel has ended the term" of Judge Miller, he wrote: "Politics are the curse of this country. Without them we should have been in better condition in the war, and without them, I don't think we would have had any war. They certainly did not realize that Japan controlled 93 percent of our gasoline and most of our rubber, or they would have thought twice, beginning years ago, and we would not have had the third term (of President Franklin D. Roosevelt)."

### **Traffic Signals Under Review**

Mr. Eno's opposition to traffic lights received a boost that month when Director Joseph B. Eastman of the Office of Defense Transportation demanded drastic revision of traffic signals and stop signs, and readjustment of stop-and-go cycles to speed the war effort. Mr. Eno maintained that when traffic lights were removed they should be replaced with flashing red or amber blinking lights. "On minor highways, before vehicles enter the main highways, there should be two stop signs, one close to the intersection and one a little way back. On main highways, 'slow' signs should be used instead of 'stop' signs."





*Federal Bureau of Investigation instructors at Yale Bureau of Highway Traffic, Strathcona Hall, New Haven, Connecticut.*

### **Praise for Work of the FBI**

Writing to an English friend in the war year 1943, Mr. Eno praised J. Edgar Hoover, Director of the Federal Bureau of Investigation, for his "wonderful work" in Washington. He was pleased that Hoover "now has a traffic school" where Eno textbooks were used as educational tools.

He especially admired a 32-year-old traffic engineer and academician, Wilbur Stevenson Smith, who was Coordinator of the FBI's Traffic and Transportation Courses, and also a member of the faculty of Yale University's Bureau of Highway Traffic. His FBI classes were attended by law enforcement executives from state, county, and city governments and federal agencies.

Mr. Eno chose Wilbur Smith as a technical advisor of the Foundation and selected him as an alternate for the Board of Consultants. He entertained Smith and Theodore M. Matson, Director of the Yale Bureau of Highway Traffic, at his Saugatuck home. Smith has been actively associated with the Foundation ever since. He was elected President in 1965 and has served as Chairman of the Board since 1966.

### **Colonel Goetz Elected President**

Directors of the Eno Foundation for Highway Traffic Control gathered only once in 1943, and that was at the annual October meet-

ing at Mr. Eno's Saugatuck home. Vice President Goetz presided. He, Chairman Eno and Directors Day, Mrs. Eno, Kelsey and P.K. Smith were reelected to the Board. Upham was the only new member, transferring from the Board of Consultants to fill the place on the Board vacated by President Pinchot.

The directors elected Colonel Goetz as the new President of the Foundation. Kelsey and Upham were elected Vice Presidents; Day, Special Treasurer (representing Yale); P.K. Smith, Secretary and Treasurer, and Alberta Eno, Resident Director. Mary Briody was appointed Assistant Secretary and Treasurer.

Consultant Board terms expired for Bradley, Houghton, Marsh and Miller. All of these except Houghton were reelected to 3-year terms along with Maurice E.T. Rotival. Matson was elected to fill the unexpired term of Upham. Elected alternates, in numerical order were: Sours, Steinberg, W.S. Smith, Mickle, Fritts, DeBuys and Taylor. Mr. Eno recommended that Wilbur Smith be placed on the Honorary Advisory Board.

Several expenditure authorizations were passed, including an appropriation of \$10,000 to Yale to be spent as approved by the Eno Board of Directors.

### **North Africa Adopts Eno Code**

Several days after the 1943 annual meeting of the Foundation, Mr. Eno received a letter that gave him probably the greatest boost of his spirits and morale in the waning years of his career. It was signed by Brig. Gen. J.V. Dillon, Provost Marshal, Headquarters of the North African Theater of Operations, and it said: "All British and American personnel attached to Allied Force Headquarters have been ordered to conform to the spirit embodied in your code."

General Dillon had sent a French translation "to the authorities here in North Africa with the request that it be adopted by the French Army and the civil authorities of Morocco, Algiers and Tunisia."

Le Systeme Eno that had saved Verdun in World War I—and with it, France—was again being used in its updated version to expedite ground troops, supplies and munitions. Nearly the whole code was being used, eliminating only the inapplicable parts.

"It may surprise you to know," Mr. Eno said in his reply to General Dillon, "that practically the same code, adopted by Paris in 1912 was put in operation by the French at the front in 1918. Both English and American troops had to follow as there was nothing else at the time. It is curious that the code furnished by the French in 1912 had to be observed by the British and American troops over there in 1918, and now 25 years afterwards, the same code, revised, is recommended to the French by the Americans."

### **General Dillon Introduces Himself**

When Mr. Eno next heard from General Dillon, the General was in Paris as Deputy Theater Provost Marshal, Headquarters Communication Zone, European Theater Operations, United States Army.

"Italy being a part of the North Africa Theater of Operations," the General said, "the (Eno) Road Traffic Control Code with Safety Rules for Pedestrians was applicable there, as well as in North Africa. It is a very practical code and the best I have come across."

General Dillon said he had not studied the traffic situation in France, but noticed that "the principles of the Eno Code are followed in the traffic control system adopted by the military forces here."

Mr. Eno's new correspondent introduced himself. General Dillon had received law degrees at Georgetown University in Washington



and taught law at the U.S. Military Academy at West Point, 1939-41. He returned to Washington as Chief of the Military Police in the newly created office of Provost Marshal General. While at this position he became intensely interested in traffic control in the United States, and was appointed the War Department's representative on the Energy Traffic Law Enforcement Program of the International Association of Chiefs of Police. He "stumped a good part of the United States preaching traffic law enforcement."

When he was appointed Provost Marshal General in North Africa in 1943, "traffic was in quite a deplorable and unorganized condition there."

"I succeeded in having the Eno Code adopted for the Theater," the General continued, "and in a short time order was created out of chaos . . . I take considerable pride in having the wisdom to adopt the Eno code."

### **Who's Who in Eno Foundation**

Mr. Eno countered with information about himself and a rundown on personnel at the Eno Foundation. His Washington home, he said, was opposite the Church of the Covenant at the corner of N and 18th streets.

He identified the people listed in the Foundation's letterhead as follows:

*Colonel Goetz, my nephew by marriage and now executive officer of West Point, is President. Mr. Upham, Vice President, an engineer, is Director of the American Road Builders Association. George Parmly Day, Special Treasurer, was until lately Secretary and Treasurer of Yale University. Philip K. Smith, an accountant with my law firm, Simpson, Thacher and Bartlett, is Treasurer. Mrs. Alberta Eno (Resident Director) is my second wife. Mr. Shertzer is our research engineer, and Professor Roscoe Ellard, besides being Managing Editor of Publications, is also Professor of Journalism at Columbia University.*

*On the Board of Consultants: Judge J.K. Bradley is one of our lawyers. Mr. Cameron, formerly head of the Safety Division of the National Security Council. Captain DeBuys, my great nephew, is now in the South Pacific. Burton Marsh is head of the Traffic Safety Division of the American Automobile Association. Judge Miller, former head of the traffic court in Bridgeport (Connecticut). Professor Morrison, head of the Department of Transportation of Northwestern University. L.R. Palmer, head of the Safety Section of Equitable Life Assurance Society. Professor Rotival, Acting Liaison Officer of all Allied Military Missions of General de Gaulle. Wilbur S. Smith, Associate Director of the Yale Bureau for Street Traffic Research and employed part-time by the Eno Foundation. Samuel W. Taylor, editor of The Rider and Driver magazine, worked with me at the start many years ago; he represents the horse interests. Sidney Williams is head of the National Safety Council.*

### **Knew Goetz at West Point**

General Dillon replied that he knew Colonel Goetz. "He came to West Point as Executive Officer to the Superintendent when I was teaching law there in either 1940 or 1941. At that time, General Eichelberger was Superintendent. I found Goetz extremely personable and easy to deal with."

Referring to another close associate of the Eno Foundation, General Dillon said he knew Frank Kreml very well. "I regard him as one of the foremost traffic experts in the world. He is now a Lieutenant

Colonel with the Fifth Army. He has a sound conviction that the principles of traffic control are the same for the military as for civilian. He applied his knowledge of civilian traffic control to the military job. His success in handling huge traffic problems with the Fifth Army (in Italy) attests the soundness of his conviction."

Mr. Kreml, who rose to the rank of Brigadier General in the war, was the author of various texts, manuals and articles on transportation, traffic and traffic safety. Before entering war service he had performed traffic safety work in Evanston and Chicago, Illinois, and served as a public safety specialist at the University of Purdue; Director of the Traffic Division of the International Association of Chiefs of Police; and Director of the Traffic Officers Training School (now Traffic Institute) of Northwestern University. After the war he was Vice President of Northwestern and Associate Director of the University's Transportation Center, which is now consolidated with the Traffic Institute. He was President and Chief Executive Officer of the Motor Vehicle Manufacturers Association, and since 1981 has been President of the Consortium of Government Counselors. He held many organizational honors, including chairman of the President's Highway Safety Task Force in 1970 and of the National Safety Council.

Expressing his philosophy of success in the Marquis *Who's Who in America*, Kreml declared that "compromise is the essential of leadership, critical to success." He qualified the assertion, saying that he dared not "compromise basic values or judgments based upon them."

He added:

*My evaluation of my life is that I served most successfully when I held to principle. Thus on two major occasions—one in the U.S. Army in World War II and the other during my service as Vice President in Northwestern University—when principle dictated violation of direct orders of my superiors I found in each of these both spiritual and temporal reward heightened by the peril of my chosen course.*

### **War Wrecks Paris Discipline**

General Dillon wrote from Paris that "the most reckless driver in the world individually is the Frenchman." He cited the huge numbers of accidents involving French civilians and said that on an enforcement index of ten, "the index maintained in Paris by civilian police is a small fraction of one."

Mr. Eno recalled that "traffic control in Paris began in 1909, went to pieces in 1914, revived in 1920, and continued to improve to the last time I was there in 1935. The replacement of the Parisian police by the German (occupation) authorities undoubtedly had a great deal to do with the chaos there."

But he recalled that the last time he was in Berlin, traffic was well handled there by his friend Major Seyffarth.

### **How Germany Hoodwinked Allies**

At a Berlin luncheon in Mr. Eno's honor in 1935, nine police officers were present, "and they all had the appearance of being army officers of high grade." He explained: "At the end of World War I Germany was allowed to have 100,000 police. Nobody realized at the time what they were doing about this. The fact was they gradually replaced the municipal police with army officers who acted as instructors in military work. When this work was done, they replaced them with other army officers so that gradually the police became a military organization. As fast as they were educated they were sent elsewhere pending the time when they would be needed."

# CHAPTER 16

## Mr. Eno's Final Years

Italy had surrendered in 1943 and World War II was moving toward a victorious climax for the Allies in the next 2 years. Although an American wartime moratorium on many major phases of civilian transportation was in effect, including road construction and automobile manufacturing, the Eno Foundation for Highway Traffic Control was in the midst of its most active and productive period up to that time. It was preparing for the inevitable boom in cars, trucks and travel that would surely follow the war's cessation.

### **Second Eno President Dies**

Amos R.E. Pinchot, lawyer-publicist who was elected President of the Eno Foundation in 1942, succumbed to an extended illness on February 18, 1944, without ever having presided over a Foundation meeting.

### **First Highway Traffic Conference**

The following April 14 the Eno Foundation sponsored a highly successful Highway Traffic Conference at the Waldorf Astoria Hotel in New York. It was attended by more than 100 experts in traffic from 12 states, the District of Columbia and Canada.

Mr. Eno, though weakened by failing health, welcomed the guests, telling them that they could greatly assist in solving postwar traffic problems. "The solution," he said, "will be of even greater importance at the close of hostilities when there is sudden increase in the number of vehicles using our highways, which, even today, are inadequate to serve our traffic demands." Traffic control, he added, involves the traffic engineer, the highway engineer or road builder, and the educator. "Mass transportation on our highways is related to the coordinated movement of people and commodities by rail, water and air."

The morning session was presided over by Charles Upham, Engineer-Director of the American Road Builders Association, Washington, D.C., and a very active Vice President of the Eno Foundation.

After introductory remarks by Mr. Eno, the Conference heard from Harold F. Hammond, President of the Institute of Traffic Engineers, New York, on "Functions and Responsibilities of Traffic Engineers." He urged designers to build more safety into postwar highways.

Lawrence A. Hince, Inspector, Federal Bureau of Investigation, Washington, spoke on "Police Responsibility in Traffic Control and Regulation." He stressed the need for safety training of local police.

## Proposes Limited Access Routes

"Responsibilities of the Highway Engineer and Road Builder for Traffic Operations" was the subject of H.G. Sours, Director, Ohio Department of Highways, Columbus. He recommended building limited access express routes in cities rather than widening old streets.

G. Donald Kennedy, Vice President, Automotive Safety Foundation, Washington, D.C., speaking on "The Education of Road Users," said the best form of education was to give the public concrete evidence of what a safe and efficient highway can be.

Burton W. Marsh, Director, Traffic Engineering and Safety Department, American Automobile Association, Washington, D.C., spoke on "Motor Trends." He predicted "a speed splurge induced by psychological acceleration."

Theodore M. Matson, Director, Bureau for Street Traffic Research, Yale University, presided over the afternoon conference panel. Speakers and their subjects on current and postwar needs were: H.C. Whitehurst, Director of Highways, District of Columbia, on "Traffic Operation Needs in Road Building;" Dr. Herbert J. Stack, Director, Center for Safety Education, New York University, "Safety Education;" Gordon H. Sheehe, Acting Director of Training, Northwestern University Traffic Institute, Evanston, Illinois, "Traffic Officer Training;" D. Grant Mickle, Traffic Engineer, Automotive Safety Foundation, Washington, D.C., "Traffic Engineering;" and Wilbur S. Smith, Bureau of Street Traffic Research at Yale University and the new part-time Technical Consultant of the Eno Foundation, "Coordinating Traffic Safety and Facilities."

The Conference received national recognition in trade journals and metropolitan newspapers. Full texts of the conference papers, along with complete transcripts of the discussions, were published by the Eno Foundation.

## Board Increased to Twenty-One

In June 1944 the Eno Foundation Directors increased the membership of the Board of Consultants from 14 to 21 with one class of seven changing each year. Wilbur Smith and Samuel Taylor were elected to 1-year terms; William Eno DeBuys and A.S. Kelley, 2 years; Roy Crum, W.W. Polk and H.G. Sours, 3 years.

At the 1944 annual meeting in October, President Goetz and all other officers were reelected. Tyrell B. Shertzer was appointed Research Engineer; Roscoe B. Ellard, Journalism Professor at Columbia University in New York and a resident of Saugatuck, was appointed part-time Managing Editor of Publications. Although Professor Ellard was a neighbor, he did not know about Mr. Eno's traffic fame until after he was offered the Foundation position.

W. Smith and Taylor were reelected to the Board of Consultants, joining a new class that included Mary Briody, Copell, Matson, Shertzer and Vey.

The Directors voted to appropriate \$500 as a matching fund for the Yale University Bureau of School and Community Service to pay for 285 Yale University Press publications to be presented to the Westport, Connecticut, Public Library in honor of Mr. Eno.

When the volumes were formally presented on April 5, 1945, a reception was held in the library. Mr. Eno was unable to attend on account of illness, but the Foundation was represented by Mary



*(Left) During this 1944 conference sponsored by the Eno Foundation, participants warned that unless highways are rehabilitated and additional roads constructed, "extreme death and accident rates will be a certainty" when wartime gasoline rationing ends.*

*(Right) These Eno conference participants are discussing strategy; left to right, Burton Marsh, B.G. Sours, L.A. Hince, Charles Upham, and Harold Hammond.*



Briody, George Parmly Day, Professor and Mrs. Roscoe Ellard, Mrs. Eno and Wilbur Smith.

### **Wilbur Smith Heads Survey**

Early in 1945 the Foundation launched a nationwide survey of traffic organization on city and state levels. Wilbur Smith was Director of the cooperative study of the functions of traffic and safety organizations in the engineering and enforcement agencies of both city and state governments. The purpose was to foster cooperation and understanding among traffic engineers, enforcement officials, highway engineers, legislators, and the driving public.

Professor Smith, in an interview with *The Bridgeport Post*, warned that even with new highways the bulk of motor vehicle traffic would remain on existing roadways, and that problems of control and regulation on these existing facilities could not be minimized. "New roads are fed by old ones," Smith pointed out. "New traffic is induced as facilities, industry and invention develop. Traffic regulation is always basic for safety and the efficient flow of men and goods, no matter how many roads we have."

Preliminary reports on the nationwide survey were distributed to the Boards of Directors and Consultants for suggestions and reactions. The revised presentation was published and mailed to highway traffic enforcement officials throughout the country.

### **Mr. Eno's Last Conference**

On May 25, 1945, the Second Annual Conference of the Eno Foundation was held at the Waldorf Astoria. Mr. Eno was greeted with a standing ovation when he entered to welcome the guests. But because he was too weak to stand and too blind to read his manuscript, his address was read by his long-time secretary, Mary Briody.

"My friends," he addressed the audience, "the science of traffic control is a field to which I have devoted 46 years, and a field to which you gentlemen have made and are making great contributions. So it is my personal pleasure as well as my official privilege to welcome you to this conference."

Recalling that his welcome address at the First Annual Conference dealt with traffic in general, this time he devoted most of his remarks to suppression of unnecessary noises, a campaign he had been conducting since 1907. "My experience," he said, "convinces me that remedies can be obtained through study and the cooperation of

traffic, municipal and enforcement officials.”

Emphasizing the need for more highway safety precautions, he said that from the Pearl Harbor attack on December 7, 1941, until the first of February 1945, traffic fatalities in the United States numbered 2,726,000, three times the number of American war casualties—killed, wounded, missing and captured.

### **Upham and Smith Conduct Sessions**

Two officials of the Eno Foundation, Vice President Charles M. Upham and Technical Consultant W. Smith, presided at the morning and afternoon sessions, respectively.

Morning speakers and their subjects were: Fred A. Eldean, Public Relations Consultant, New York, “Public Support for Traffic Safety Activities;” Albert Coates, Director, Institute of Government, University of North Carolina, Chapel Hill, “How to Develop Traffic Training Programs at a State Level;” Joseph Kluchesky, Chief of Police, Milwaukee, Wisconsin, “Every Policeman a Traffic Officer;” Samuel W. Taylor, Editor, *The Rider and Driver*, New York, “The Evolution of Traffic Control.”

Afternoon speakers were: C.B. McCullough, Assistant Chief Engineer, State Highway Department, Salem, Oregon, “Designing Suburban and Rural Roadways for Pedestrian Traffic;” Herman A. MacDonald, Commissioner of Public Works, Boston, Massachusetts, and President of the American Association of State Highway Officials, “Uses of Traffic Data on Highway Planning and Design;” Leslie Williams, City Planning Engineer, American Transit Association, New York, “Vehicles and Roadways for Postwar Transit Operations.”

Dr. Herbert J. Stack, Director of the Center for Safety Education, New York University, conducted a panel discussion on “Planning for More Effective Coordination of Traffic Activities.” Panelists were: L.A. Hince, Inspector, Training Division, Federal Bureau of Investigation; Theodore M. Matson, Director, Yale Bureau of Highway Traffic; Burton W. Marsh, Director, Traffic Engineering and Safety, American Automobile Association, Washington; Robert E. Raleigh, Safety Division, International Association of Chiefs of Police; and D. Grant Mickle, Traffic Engineer, Automotive Safety Foundation, Washington, D.C.

The Second Annual Eno Highway Traffic Conference received even more widespread publicity and recognition than the first, in national publications and the Eno Foundation books.

### **Mr. Eno’s Last Board Meeting**

When the annual meeting of the Board of Directors of the Eno Foundation for Highway Traffic Control was held at Mr. Eno’s Saugatuck home October 9, 1945, all seven members were present and all were reelected to their respective offices: Eno, Chairman of the Board of Directors; Goetz, President; Kelsey and Upham, Vice Presidents; Day, Special Treasurer; P.K. Smith, Secretary and Treasurer; and Mrs. Eno, Resident Director.

DeBuys, Keeler, Morrison, Seymour and Transeau were reelected to the Board of Consultants while John M. Gleason and William M. Groth were elected to succeed Cameron and Simpson, whose terms as Consultants had expired.

Ellard, who a year earlier had been appointed Managing Editor of Publications, was elected to the Board of Consultants for 2 years to fill the unexpired term of Lew R. Palmer, veteran Director who died March 23, 1945. Ellard wore several hats. His principal employment was as Associate Dean of the Graduate School of Journalism at

Columbia University in New York, but he lived in Saugatuck where he worked part-time as Editor, Publications Director and Manager of the Foundation.

### **Activities Increased as War End Nears**

Making a report to the Directors at the annual meeting, Vice President Upham declared: "Activities of the Eno Foundation have increased in the last 12 months. This increase has resulted from the need of this postwar period for more up-to-date information on traffic control and from our opportunity to employ competent and experienced men on a part-time but adequate basis at low cost to the Foundation."

Professor Wilbur Smith, Associate Director of the Yale University Bureau of Highway Traffic, gave 1 day a week as Technical Consultant of the Eno Foundation. Like Professor Ellard, he lived in Saugatuck.

Vice President Upham said in his 1945 review that (1) a study of the abatement of traffic noise was underway, (2) the Eno Foundation's library was being reorganized and brought up to date, (3) reports on traffic conditions flowed into the Foundation from all 48 states, (4) news releases of Eno activities were published during the year in every state of the Union, (5) editorials in major newspapers and trade magazines supported the Foundation's work, (6) three traffic studies were in progress—on standards in parking enforcement, highway construction, and safety education, and teacher training, (7) an executive committee was in service, consisting of Mary Briody, Wilbur Smith and Charles Upham, and (8) quarterly reports were made by the Manager to the Board of Directors and Board of Consultants.

### **The Foundation on Solid Ground**

"The Eno Foundation," Upham reported, "now has its best opportunity in years to function as a non-partisan, non-profit sounding board and clearing house of traffic ideas—a stabilized and permanent study center and coordinating institute for traffic engineering, highway engineering, traffic enforcement, and public understanding of traffic control."

Several large tire manufacturers and oil companies were cooperating with the Eno Foundation in conducting a nationwide campaign for sportsmanship in driving and understanding of the economic value of efficient traffic movement.

The Foundation, Upham said in conclusion, is functioning soundly and strongly in a program of nationwide usefulness. He foresaw the Foundation's development "into the leading non-partisan traffic organization."

Chairman Eno's health seemed better at the meeting, as it always did when the Foundation was enthusiastically and optimistically engaged. He urged closer communication between Directors and Foundation activities, suggesting that all publications, reports, etc., be mailed to members of the Board when issued, and that the Directors should meet more frequently—at least four times a year. This was Mr. Eno's last Board meeting.

### **William P. Eno's Chronology of Illness**

His continuing health problems dated back 7 years, to October 20, 1938, when he wrote a friend, "I am suffering from pink eye and have been laid up a week."

The progression of his illness was described in his correspondence

from which the following excerpts were taken.

September 2, 1939: "I was ill, in the hospital for 6 weeks, and am now at home where I came about 5 weeks ago. I am not writing myself as I am not strong enough, which will account for my letter being signed by my secretary."

October 17, 1939: "I have been ill and am afraid I shall not be able to be up to much work for some time. Prof. Charles J. Tilden, President of the Eno Foundation, is in direct charge of the work here."

November 29, 1939: "I am getting better and shall be able to go South shortly." (He did not go.)

June 24, 1940: "I have been very ill, but may be able to go to the July 4 ceremony."

January 22, 1941: "I am still ill and not able to do my usual amount of work. I have also stayed in the country (at Saugatuck) instead of opening the house in Washington—now for the second year"

March 3, 1941: "I worry more than I ordinarily would, I suppose, because I am ill, having been confined to the house practically all the time for the past 2 years. My house in Washington has been closed nearly 3 years and I doubt I shall ever occupy it again."

May 25, 1941: "I have been unable to leave my home for many months. My general health is better and extremely good for a man of my age, but my eyesight is almost daily getting worse. I have not walked more than 200 or 300 feet at a time, I think, for about a year, so I cannot get away. I could not get on a train and petrol is rationed. However, part of each day is spent on traffic work and I shall have another book entitled, *The Evolution of the Traffic Code*."

March 25, 1942: "I have been pretty ill now for about 3 years and am finding it very hard to continue the work I am doing on traffic."

August 13, 1942: "I am having a hard time with all the calamities that have come to me and to the Foundation lately, and, at 84, I cannot rise to them as I was able to do earlier in life."

October 15, 1942: "I have not been back to my home in Washington now for more than 3 years on account of illness and about the first of March I rented it to the Canadian Legation and shall probably not return there again."

October 26, 1942: "I have been ill for 4 years and am not able to walk nor see very much and so it has been more difficult than I anticipated to work as I have been accustomed to doing."

December 11, 1942: "My eyes have gone back on me to such an extent that I cannot read at all myself and have to trust it to others."

February 12, 1945: "Unfortunately, I am now almost blind and so the principal things I have to live for are the memories of the past as I cannot see to read or even see pictures, so it is a lonely world to me henceforth, I fear."

February 15, 1945: ". . . such an unfortunate siege of illness."

February 28, 1945: "I am each day growing a little blinder and there doesn't seem to be any help for it. However, I am keeping up interest in my work."

March 1, 1945: "I am in hopes that my eyes may improve by operations and I will be able to get back to active service."

March 30, 1945: "I do hope my work is going to be continued and I have taken all steps I can to make it so. It (the Eno system of traffic control) is practically in force in most, if not all, countries in the world."

April 5, 1945: "I do wish I could be there (in France) for I love Paris better than any place in the world. I was beginning to be as fond of Washington as of Paris and had hoped to go back, but health interfered. After so many happy and busy years there I do not care to see it again, though I would like to see Paris."



June 28, 1945: "My eyes broke down last November"

Then came the final reference to his health in letters saved in his scrapbooks—large, rugged, leatherbound volumes—which he started keeping at the beginning of the twentieth century.

August 1, 1945: "My eyes are of little use to me now. I can see my way around the room and that is about all"

The absence of additional entries indicated further decline in the health of the man who so nobly continued his work for traffic safety under the handicaps of weakness and blindness. Symbolically significant was the fact that his traffic journal ended in the thirtieth volume. Thirty is a number borrowed by writers from the telegraphers' code; it is used to signify the finish.

In October 1945 his relative, Maxine DeBuys Bray, was moved to poetic allegory as she gazed from Long Island Sound at Judah Rock on the shore at Saugatuck where the earliest hero of world traffic regulation was approaching the end of life's road.

Under the title, "Thoughts on the Close of a Day in Autumn," she wrote:

*It was late afternoon when I stood there and looked across the water.*

*On the opposite shore stood his house.*

*In the sky, centered a little above the house, was the sun, a flaming sphere of beauty on its downward journey.*

*I thought of him and wondered—and hoped too—that his journey might be accomplished with as much ease as was that of the sun.*

*I looked away for a moment, as if by not watching I could stay the passing of what had been a beautiful and happy day.*

*But when I looked again across the water, the sun was half hidden behind the roof line of the house.*

*I watched it slip quietly, peacefully away, moving slowly as if it was tired after the long bright day.*

*It left behind a rosy glow of light, as I knew he too would some day leave in many hearts the glowing memories of hours spent in that house, his home.*

*The end of another day had come. Then I realized it was not the end, as I knew the sun had only gone on its way to bring light to the other side of the world. Its course was endless.*

*Although I was sorry to see it go, and knew its going was inevitable, I found consolation in the thought that it had gone, only to rise again in the glory of another dawn.*

### **A Farewell and Yale Salute**

On the morning of December 4, 1945, *The New York Herald Tribune* reported in a featured story in its obituary section:

"William Phelps Eno, who devised the first traffic plans for this city, London and Paris and was head of the Eno Foundation for Highway Traffic Control, which is affiliated with Yale University, died in the Norwalk (Conn.) General Hospital yesterday. He was 87 years old"

The lead paragraph was followed by a biographical sketch that traced Mr. Eno's career as a traffic pioneer, an innovator, a scholar, an author, World War I Director of the District of Columbia Home Defense League, member of the National War Industries Board, an international traffic authority honored by governments at home and abroad, and a member of some of the most exclusive and prestigious New York and Washington clubs.

The concluding paragraph: "He married Alice Rathbone of New Orleans in 1883. She died in 1911. He leaves a widow, his second wife,

the former Alberta Averill; a nephew, Gifford Pinchot, former Governor of Pennsylvania, and two nieces, Mrs. William Leon Graves of Beverly Hills, California, and Mrs. H. Hakan Steffanson of this city.”

A short memorial service was held in the handsome, dignified Colonial building endowed by Mr. Eno and built across the road from his Saugatuck residence to house the headquarters of the Eno Foundation. He was entombed in the Eno family cemetery in the ancestral hometown of Simsbury, Connecticut.

Five days after Mr. Eno’s death, the President and Fellows of Yale University met and adopted this resolution:

*Voted, to record with sorrow the death of William Phelps Eno, honored at home and abroad as ‘the Father of Traffic Regulation.’ He made contributions of permanent value in this field long before its importance was recognized by others and through the years he enlisted the active interest of state and local governments in planning wisely to solve the problems incident to traffic control. Yale University counts it a privilege to be affiliated with the Foundation established by him for the purpose of carrying forward in the future the work which he began.*

# CHAPTER 17

## Goetz Succeeds Eno

Minus the traffic genius who had led and guided the Eno Foundation for 24 years, the Board of Directors met on December 11, 1945, at the Eno residence in Saugatuck with President Goetz presiding.

“It becomes my sad duty,” the President said, “to report the death of William Phelps Eno, Founder and Chairman of the Board, on December 3, 1945.”

Directors present besides President Goetz were: Mrs. Eno, the Chairman’s widow; Vice Presidents Kelsey and Upham; and P.K. Smith, Secretary and Treasurer. Day was absent. Mary Briody was appointed secretary of the meeting and kept the minutes.

The following resolution passed unanimously:

“BE IT RESOLVED: That the officers and employees of the Foundation mourn the death of William P. Eno;

“That his untiring efforts and devotion to the success of the Foundation for nearly half a century of his eventful life shall be an inspiration to those responsible for the continued success of the Foundation, which remains as a monument to his unselfish pioneering.”

### Miss Briody Replaces Mr. Eno

Next in order was a motion to fill the Board of Directors vacancy caused by Mr. Eno’s death. Mrs. Eno nominated Miss Briody, who had served as Mr. Eno’s secretary since 1912—33 years. Mr. Kelsey seconded the nomination and Miss Briody was unanimously elected.

For an election of Mr. Eno’s successor as Chairman of the Board of Directors and Chief Operating Officer, President Goetz stepped aside. Vice President Kelsey presided. Goetz was nominated and unanimously elected (Goetz not voting). He resumed chairmanship of the meeting and announced that he had been released from active duty by the U.S. Army and expected to devote much more time to the business of the Eno corporation. He held the titles of Chairman and President of the Foundation for the next two decades.

### Returns to Army Duty

Colonel Goetz had retired from the Army in 1939, but he returned to active duty and performed wartime service as Executive Officer of the Post and Commanding Officer of Troops at the U.S. Military Academy, 1940-1946. Colonel Goetz first became Eno President in 1943 while serving at West Point.

A native of Cape Girardeau, Missouri, Colonel Robert Charles Frederick Goetz was born April 18, 1886, and therefore was 59 years old when he accepted the Eno chairmanship. He was the son of Frederick Frank and Alvina Willy Goetz. After graduating from Perryville (Missouri) High School he worked as a clerk in a general

store, attended Southeast Normal School at Cape Girardeau for 1 year, graduating with a teaching certificate in 1904. He taught school for a term and attended Moothact Commercial College for 3 months, then successfully applied for admission as a Cadet at the U.S. Military Academy from the Fourteenth Congressional District of Missouri.

He entered West Point as a Cadet in 1905. Although his three given names offered all sorts of nickname possibilities, his fellow plebes called him "Willie." This was later shortened to "Bill," by which he was affectionately known among his army associates for the rest of his life. Among Goetz's classmates at the military academy were Generals George S. Patton, Robert L. Eichelberger and Jacob L. Devers of World War II fame.

As an Academy undergraduate Goetz played football the 3 years of his eligibility, but did not receive a letter. He also participated in boxing, tennis, lacrosse, shot putting and the tug-of-war. He was president of the West Point Canoe Club, and he was a sharpshooter. During his regular army career he was a polo player and one of his favorite forms of relaxation was salmon fishing on the Miramichi River in Canada.

### **Transfers to Field Artillery**

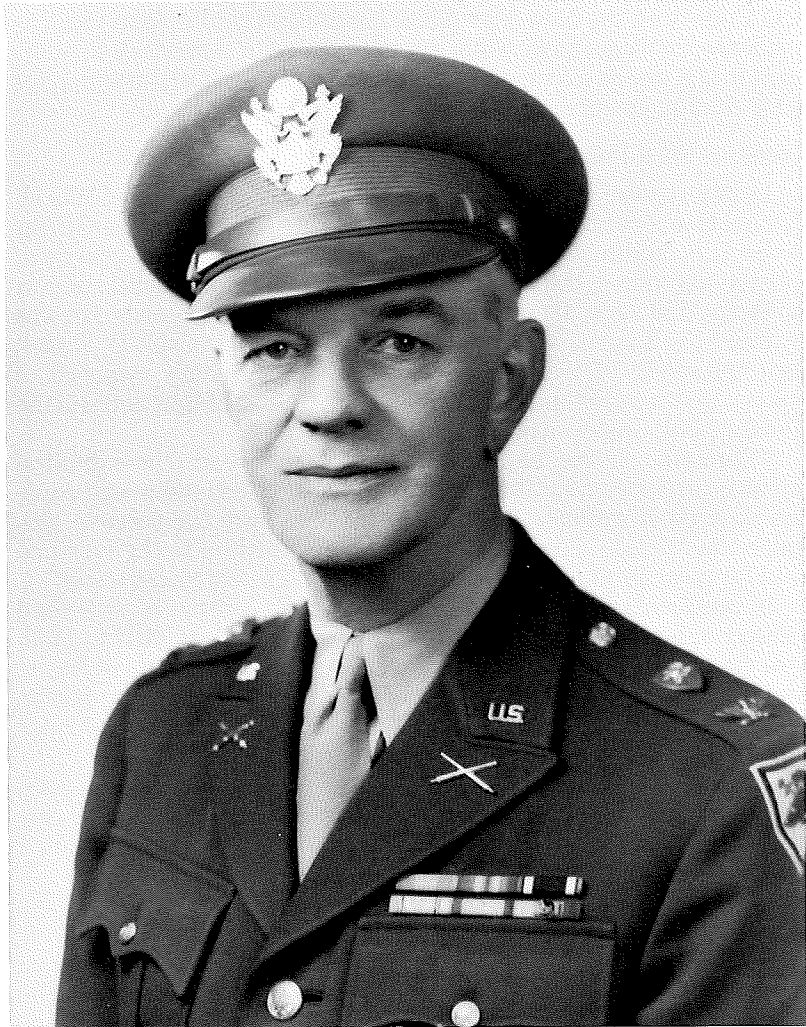
Commissioned a Second Lieutenant upon graduation in 1909, he served in Cavalry units at various posts in the American West. He graduated from the Mounted Service School at Fort Riley, Kansas, in 1913 with high grades and was recommended for a second-year course. Instead, he transferred to the Field Artillery and served as aide-de-camp to Brig. Gen. Clarence E. Edwards in Hawaii, Panama and Costa Rica until 1917. During this time he was promoted to First Lieutenant.

After returning to the States as a Field Artillery instructor, he was promoted to Captain on May 15, 1917, a month after the United States entered World War I, while he was attached to the Third Pennsylvania Field Artillery at Wilkes-Barre. After being transferred to the Presidio at San Francisco as an instructor and commander, January-May, 1918, he was detailed to organize and command the Third Brigade Field Artillery Reserve Division at Camp Jackson, Columbia, South Carolina.

### **Organized Harvard ROTC Unit**

While he served there under the Post command of Brig. Gen. Robert Melville Danford, he received temporary promotion to Major in May, Lieutenant Colonel in July, and Colonel in October. He was assigned in January 1919 for a short time to the Officer in Chief of the Field Artillery in Washington, D.C. From there, on recommendation of General Danford, he went to Cambridge, Massachusetts, to organize the Military Department of Harvard and served as the University's first Professor of Military Science and Tactics. In the summer of 1919 he transferred to the American Expeditionary Forces in France and Germany. Colonel (temporary) Goetz returned to the grade of Captain in January 1919, was promoted to Major in July 1920, and to Colonel in August 1938.

He returned to the States to be Professor of Military Science and Tactics at Harvard for 5 years. During this time, in 1922, he married 22-year-old Antionette Wood Eno ("Tony") Graves, a native of Paris, France, in a Washington, D.C., ceremony. (She was William P. Eno's grandniece.) They became the parents of two daughters, Harriet Eno Goetz Holly of Boca Raton, Florida, and Antionette Wood Goetz Logan of Fort Lauderdale, Florida.



*Colonel Robert Charles  
Frederick Goetz*

In 1923, President A. Laurence Lowell of Harvard University conferred on Colonel Goetz the honorary degree of Master of Arts in recognition of his accomplishments at the University. Upon leaving Harvard Colonel Goetz served 4 years in the Inspector General's Department in Washington and Baltimore under the command of General of the Armies Douglas MacArthur.

#### **Military Attache in Europe**

Between 1931 and 1933 Colonel Goetz cut a dapper figure in full military dress at numerous court functions in Europe while he was the American Military Attache for Belgium, The Netherlands and Luxembourg under Ambassador Hugh Gibson. (Ambassador Gibson often encouraged Goetz to wear "that short jacket with the red lapels and the gold epaulets.") He was an advisor at Geneva, Switzerland, for the Disarmament Conference of 1933-1935 in the American Delegation headed by Ambassador Hugh Wilson. He represented General John J. Pershing, Commander of the American Expeditionary Forces, at the funeral of King Albert of Belgium in 1934.

Colonel Goetz returned to the United States and served as Professor of Military Science at the University of Missouri before retiring from the Army at his own request in 1939. His retirement after 30 years of military service did not mean idleness. He and his family moved to "Parade Rest," their home in Wilton, Connecticut, in Fair-

field County on the New York State border and not far from the Eno residence in Saugatuck. With the imminence of American involvement in the war in Europe, he set up a course in military training for draft-eligible young men of Fairfield.

### **Becomes West Point Executive Officer**

In 1940, a year prior to the United States' entry into World War II, Colonel Goetz returned to active military duty as Executive Officer at the U.S. Military Academy. In this capacity he was in charge of enlisted personnel, the purchase of land and the construction of new buildings, and served on advisory and policy-making boards. He was awarded the Legion of Merit medal by General Maxwell D. Taylor, Superintendent of West Point, in 1945. Other medals awarded to Colonel Goetz were the Croix Militaire First Class of Belgium and the Medal Abdon Calderon of Ecuador.

"Throughout," the Legion of Merit citation read, "he exhibited superior professional ability, judgment, energy, leadership and devotion to duty. His efforts assisted in large measure the success with which the Military Academy expanded and adapted to the wartime need for more graduates versed in the techniques of modern war."

In comments on Colonel Goetz's nearly half century of dedicated military service, his peers praised him as a man dedicated to kindness, helpfulness, honor, honesty and compassion, and possessing an enviable sense of humor. His philosophy was embodied in a quotation attributed to Etienne de Grellet (1773-1855) and inscribed on plaques hung predominantly in his office and home.

It read: "I expect to pass through this world but once; any good thing therefore that I can do, or any kindness that I can show to any fellow creatures, let me do it now; let me not defer and neglect it, for I shall not pass this way again."

### **First Affiliation With Foundation**

Colonel Goetz officially joined the Eno Foundation in 1939 when he was elected to the Board of Consultants for a 3-year term. The next year, however, he was elected one of the seven Directors. On the same day, October 8, 1940, he was elected Second Vice President. Professor Kent Healy of Yale was elected to fill out the 2 years of Colonel Goetz's term on the Board of Consultants. The Foundation President and General Manager at the time was Professor Tilden, and the First Vice President was Amos Pinchot.

Colonel Goetz moved up to First Vice President in 1942 when Pinchot was elected President. He succeeded to the presidency in 1943 and additionally became Chairman of the Board of Directors after Mr. Eno's death in December 1945. He and his family continued to live in Wilton until 1963 when they moved to nearby Greenwich, also in Fairfield County.

Colonel Goetz's first year as Chairman-President was devoted primarily to incorporating into the Foundation the \$3 million endowment and numerous properties received from the William P. Eno estate. Steps were taken to increase the yield of investments and to market real estate, furniture, equipment, vehicles, art and other items that were not required for the service and progress of the Foundation.

### **Goetz's First Year as Chairman**

At the very first meeting of the Board of Directors after Mr. Eno's death, a consensus decision was made to base all expenditures on a budget. And on a motion of Vice President Kelsey, quarterly meetings of the Board were approved as previously suggested

by Mr. Eno.

The first of the quarterly meetings was held in February 1946 at Mrs. Eno's apartment in New York, and the schedule of Directors' meetings was revised again, this time to occur every other month. (This frequency was found later to be impractical and the Board returned to a quarterly basis.) Reports were received on the Foundation's nationwide survey of city and state traffic organizations, plans for abatement of traffic noise, and compilation of standards for parking regulation, highway construction design, and traffic safety education.

During 1946 Charles LeCraw, Jr., a young graduate out of Georgia Tech and Yale's Highway Traffic Bureau, was hired as a technical engineer.

Seven years after the Foundation's headquarters building was built, the Board of Directors met there for the first time in September 1946. All officers and directors were reelected except that P.K. Smith, Secretary and Treasurer, became Treasurer and Assistant Secretary, and Miss Briody became Secretary and Assistant Treasurer. Paul Miller and Maurice Rotival were taken off the Board of Consultants and were replaced by Arthur E. Miller and Nathan Cherniak. Those reelected for 3-year terms were: Bradley, Crum, Marsh, Polk and Sours. Grants of \$5,000 each were issued to the Bureau of Street Traffic Regulation at Yale and the Center for Safety Education at New York University.

#### **Publication Takes Priority**

During early years, grants to schools, colleges and individuals for projects in driver education and safety were a principal feature of the Foundation's program. Through Mr. Eno's own work in traffic design, the Foundation provided modest but free traffic advisory services to smaller communities. These forms of activity were curtailed or discontinued while the Foundation increased its emphasis on the publication and distribution of transportation literature.

Before the Foundation was established in 1921, eight books on traffic subjects had been written by Mr. Eno. Most were published by the author, others by the Permanent International Association of Road Congresses, the National Safety Council, and the National Institute of Social Sciences. The first Foundation publication, in 1924, was *Suggestions for Traffic Control*, by Mr. Eno. Those that followed in the founder's lifetime were written either by him or others associated with the Foundation, including W.J. Cox, T.B. Shertzer and Charles J. Tilden.

One of Mr. Eno's dreams was to have a quarterly publication on transportation published by the Foundation. He did not live to see it, but in January 1947 the Goetz administration produced the first issue of *Traffic Quarterly*, a publication that ever since has been a key-stone of the Eno Foundation's international service in all phases of transportation. The Quarterly's articles are contributed without compensation and the journal is distributed without charge.





## CHAPTER 18

# The Goetz Administration

The early years of Colonel Goetz's administration were occupied with the settlement of William Eno's estate and the launching of *Traffic Quarterly*. Backed by the Board of Directors, he sold the Eno property in Washington, the Judah Rock residence in Saugatuck, and various other parcels at prices agreeable to the Board.

A large block of Sprague Meter stock was sold for diversified reinvestment, and some artwork was marketed because of prohibitive costs of security and insurance. Offers were accepted for unneeded household furnishings, excluding silver and paintings. Mr. Eno's old clock collection was also sold. Some houses on the Eno estate surrounding Foundation headquarters were rented, and some real estate was sold, including an acre to Wilbur Smith for the building of a home for himself, his wife Sarah, and three daughters, Sally, Peggy and Stephanie. Special concessions were extended to John Graham and Sam Gilbertie, retired former employees of Mr. Eno's who lived on the estate.

Various cash grants were given to schools and universities primarily to promote transportation education. In 1951 Yale was given \$1,000 in honor of its 250th anniversary in memory of Mr. Eno. In 1958 the Foundation made a \$750 gift to the Yale Alumni Fund to honor Mr. Eno on the 75th anniversary of his graduation from the University. Other grants to universities, including Yale, were as high as \$5,000 and \$10,000. Book-purchase grants of \$500 each were made to Westport and Simsbury public schools in memory of Mr. Eno.

### Board Membership Maintained

The 20-year Goetz administration was marked by stability of leadership. The only changes on the Board of Directors were made to fill vacancies caused by deaths. The one exception came when the bylaws were amended in 1959 to authorize an increase in the number of Directors from seven to eight. The principal reason given was to overcome the difficulty of acquiring quorums at Directors' meetings; seldom were more than three or four members present except for annual gatherings. Rather obvious, however, was the desire to make a place on the Board for Wilbur Smith, who had served as Technical Advisor, member of the Honorary Advisory Board, and the Board of Consultants, author of several Eno publications, and as a leader in various Foundation projects and programs. Smith was elected Third Vice President in 1962 and held that office the next 3 years.

Mr. Smith was elected a Director on September 8, 1959. In the following month George Parmly Day died. Representing Yale University, for which he was Treasurer, he was Special Treasurer for the Eno Foundation and a Director since the seven-member Board was constituted in 1933. His vacancy was unfilled and the Board officially reverted to a limit of seven, which still exists today.

When Mr. Eno's widow, Alberta A. (Mrs. William Astor) Drayton, died August 29, 1961, she was replaced on

the Board of Directors by Charlotte Munger of the Eno Foundation staff. P.K. Smith died December 1, 1963, and was succeeded by M. Earl Campbell. Colonel Goetz died August 2, 1965, and was followed as Director by Henry A. Barnes. The first Board of Directors meeting under the chairmanship of Wilbur Smith took place in 1965 and included Barnes, Briody, Campbell, Kelsey, Munger and Upham. Campbell was recruited from the Board of Consultants. He was on the staff of the Highway Research Board in Washington, D.C., as Engineer of Economics, Finance and Administration. Barnes was Commissioner of Traffic in New York City.

Once the Saugatuck headquarters building was furnished and used by Directors, all annual and most special meetings were held there during the Goetz administration. An exception, in December 1957, was a routine session held at the San Carlos Hotel on Fiftieth Street in New York in the suite of Mr. Eno's widow, Mrs. Drayton.

### **High Regard for Colonel Goetz**

Eno Foundation's high regard for Colonel Goetz was expressed by the Board of Directors at the annual meeting January 24, 1961. The minutes reported:

*Recognizing the fifteenth year of activity of the Eno Foundation under the direction of Colonel Goetz, and aware of the high reputation which he has acquired among traffic leaders of the world, and the high quality of research and publication fostered by the Foundation during the period, it was moved and seconded and unanimously voted that the Board of Directors express their deep appreciation to Colonel Goetz for his untiring efforts and leadership.*

"With deep sorrow," Colonel Goetz informed the Directors in August 1961 of the death of Mrs. Drayton, the former Mrs. Eno, "long a member of the Board." A memorial resolution referred to "her generous interest in the work of the Eno Foundation."

### **Mrs. Munger Elected Director**

Mrs. Munger succeeded the former Mrs. Eno on the Board of Directors, assuming the offices of Treasurer and Assistant Secretary vacated upon the death of P.K. Smith. K. Martin Purala, Certified Public Accountant who had worked with Treasurer Smith, agreed to continue his service for Mrs. Munger.

### **Compliment for Wilbur Smith**

The Board of Directors, at the annual meeting January 23, 1964, passed the following resolution regarding one of the favorite members of the Eno Foundation family:

"It is with pride that we record in these minutes, as suggested by Mr. Upham, the appointment of our Board member, Wilbur S. Smith, to the chairmanship of the Highway Research Board and call attention to the article in the January 16, 1964, issue of the *Engineering News Record* bearing Mr. Smith's photograph on the cover."

Presiding over passage of this endorsement was the final official act of Colonel Goetz, and this was his last time to attend a meeting of the Board. He suffered a stroke that rendered him unconscious and he remained in a comatose condition until his death more than a year later.

The next regular Directors' meeting was held May 18, 1966, with Vice President Upham acting as Chairman of the meeting. Mrs. Munger reported on the seriousness of Colonel Goetz's illness as she

had learned from constant contact with Mrs. Goetz.

### **Smith Is Temporarily in Charge**

Wilbur Smith, who by agreement of the Board of Directors had administered affairs of the Foundation during the Chairman-President's incapacity, reported that he had a close working relationship with the finance officers of U.S. Trust, which handled the Eno Foundation's accounts. Under this arrangement, Mr. Smith said, activities of the Foundation proceeded normally. Publications continued on schedule; routine administration and technical matters had been promptly attended.

Wilbur Smith presided at the August 11, 1964, meeting of the corporation members and the Board of Directors of the Eno Foundation. On motion of Vice President Courtland Kelsey, seconded by Miss Briody, the bylaws were changed back to the limit of seven Directors.

### **Chairman Goetz Still Unconscious**

Mrs. Munger reported that Colonel Goetz's condition was poor and no improvement was evident. He showed no sign of consciousness.

Most of the Board's session involved routine business discussions. In conclusion, the members passed an Upham motion for the Eno Foundation to continue to operate independently on the basis of its now well established functioning. There had been some talk of a merger.

When the Directors met again, November 10, 1964, they were concerned by the report that Colonel Goetz's condition remained essentially unchanged.

The Board took action to increase the program of publications. Smith, presiding, was instructed to take whatever steps were necessary.

A grant was made to the University of Michigan Institute of Science and Technology for expenses of a seminar on transportation.

### **Wilbur Smith Elected President**

Colonel Goetz was still unconscious and medical opinion gave no hope for his improvement. The Board felt that some definite action should be taken to provide management.

Vice President Upham made a motion, seconded by Mrs. Munger, that Colonel Goetz be reelected Chairman and that Wilbur Smith be elected President. The motion passed unanimously.

Mr. Upham commented that Smith's high standing in the engineering field was such that it would confer honor on the Eno Foundation if trade and professional publications in the field should be notified of his election to President of the Eno Foundation.

### **Annual Meeting of Consultants**

President Smith suggested at the May 6, 1965, Board meeting that the Foundation have a once-a-year group meeting of the Board of Consultants. Each meeting would have a previously planned subject or theme, and all papers and discussions would be published in *Traffic Quarterly*. This plan became a reality later and still continues as a major fixture in the Foundation's program.

### **The Death of Colonel Goetz**

When the Eno Foundation Directors met August 24, 1965, President Smith, acting as Chairman of the meeting, reported that the Chairman of the Board, Colonel Robert C.F. Goetz, died on the sec-



*Traffic expert Wilbur Smith explains the mechanism of a traffic signal to visiting European officials at the Eno Foundation.*

(Source: The Saturday Evening Post)

ond day of the month.

The Board issued this statement:

*During his administration, Colonel Goetz sought the greatest yield from the use of the Eno Foundation's resources and at the same time honored the Founder, William Phelps Eno, with an enduring and fitting memorial. Recognizing that useful current information in the developing technology of highway traffic operations and safety placed in the hands of professional people would have immeasurable impact for good, he began publication of Traffic Quarterly and special reports on research conducted by the staff of the Foundation or supported by grants from the Foundation.*

*He viewed the publications program as a seedling and catalytic operation which would update the knowledge among practicing professionals in administration and technology to stimulate its use. He sought and published the best in technical papers and disseminated them free to appropriate professional people around the world. The response of this endeavor and its usefulness have been exceptionally gratifying to the Foundation.*

*The same concept of service that guided the Foundation under the administration of Colonel Goetz will continue with the same emphasis.*

No immediate action was taken to fill the chairmanship vacancy. The Board tended to pending matters such as property maintenance, cottage repairs, and donation of obsolete traffic signals to the Institute of Traffic Engineers (ITE) for a possible historical exhibit in the Smithsonian Institution in Washington, D.C. Plans were made to entertain a group of English transportation professionals on their way to attend the ITE convention in Boston. The trip was organized by Ernest Davis, editor of *Traffic Engineers and Control*, London. Upham was authorized to arrange a meeting of the Eno Board of Consultants in Washington, but he did not live to see it. While the Directors were awaiting his appearance at a Board meeting November 7, 1966, they were shocked and saddened to learn that he had died suddenly the previous day.

Henry Barnes, Commissioner of Traffic in New York City, was elected to succeed Colonel Goetz as a member of the Board of Directors. His peers described him as "the world's most renowned traffic expert," a man with a talent for public relations and a magnetic personality that gave him powerful influence over press and politicians.

## CHAPTER 19

# *Traffic Quarterly* Begun

During Colonel Goetz's first year as Chairman-President of the Eno Foundation for Highway Traffic Control, the organization produced four publications. The only in-house author was Wilbur Smith, Technical Advisor of the Foundation and Associate Director of the Bureau of Traffic at Yale University. He wrote on the subject of organization of traffic agencies. The other writers were Police Chief Joseph Kluchesky of Milwaukee; C.B. McCullough, Assistant Chief Engineer of the Oregon State Highway Department, and Dr. Herbert J. Stack, Director of the Center for Safety Education at New York University.

Under the personal leadership of Mr. Eno for 24 years, the Foundation published 18 reports and studies. One-third were prepared by the staff; the others were commissioned. Among topics included were the need for sidewalks, uniform traffic regulation, and uniform signing. Under the two decades of Colonel Goetz's chairmanship, 37 monographs were published. This program, separate from *Traffic Quarterly*, was continued and expanded during the Chairmanship of Wilbur Smith, Colonel Goetz's successor.

### **The First Issue**

The first issue of *Traffic Quarterly* was published in January 1947. It contained eight articles on the subject of highway safety, zoning, driving, pedestrian traffic, and three were on parking. Authors were Goetz, Charles LeCraw and Wilbur Smith of the Foundation staff; Ernest L. Bailey, Major General Philip B. Fleming, Inspector Lawrence Hince, Dr. Herbert J. Stack and Commissioner Arthur W. Wallander. Among the first year's contributors were Paul G. Hoffman, President of the Automotive Safety Foundation; J. Edgar Hoover, Director of the Federal Bureau of Investigation, and Earl Warren, Governor of California and later Chief Justice of the United States Supreme Court.

Chairmen of the Eno Board of Directors have always served as Editor-in-Chief of *Traffic Quarterly* (known since 1982 as *Transportation Quarterly*). The first Executive Editor was Roscoe Ellard, who held that position until late 1959.

Although Mr. Eno had expressed his wish for a quarterly publication in letters to members of the first Board of Directors, the concept and activation by Colonel Goetz was responsible for successful launching of the project. With worldwide distribution to management leaders in the transportation field, the magazine has done more than anything else to spotlight the Eno Foundation and establish it as a global force for improvement in all modes of transport.

## Worldwide Mailing List

The Quarterly started with a modest mailing list, but when word of its content got around, circulation growth proliferated to include the industrial nations and some Third World countries that were just beginning to establish modern communications and travel facilities. About 5,000 copies of each issue are circulated without charge to people professionally concerned with safety, efficiency, discipline and superior performance in all phases of transportation. The professionally written articles are also contributed without compensation by authors living in the United States and abroad. The excellence of the essays and their acceptance by an elite readership provide a two-way prestige street for the magazine and the authors.

Colonel Goetz spelled out the objectives in an editorial in the first issue. He wrote:

*The decision to undertake the publication of a quarterly magazine devoted exclusively to the improvement of highway traffic was made only after mature consideration. Many experts and professional men of long experience in the field of traffic have sound and logical ideas and methods for improvement of present chaotic conditions in traffic. It is hoped that each issue will warrant the approbation of an unbiased and broad approach to all phases of the traffic problem.*

In the earliest days of the Quarterly, special attention was given to the burgeoning postwar parking problems. The significance of the Eno Foundation's pioneering achievements in this field is evident in current handbooks on architectural design and traffic engineering. Their tables and diagrams on parking commonly note Eno publication sources. Topics concerned such matters as the design of parking garages and the legal, financial and administrative aspects of parking.

Quarterly subjects cover the spectrum of transportation interests, from accidents and alcohol to traffic courts and urban planning, from driver education and vehicle inspection to highway lighting and freeway surveillance, from public relations for traffic officers to laws governing one-eyed drivers in Belgium.

## Sensitive to Changing Climate

As the missions of the Quarterly and the Eno Foundation were expanded, both publication and organization became more diversified, venturing much further afield in transportation than when both were founded. Some of the subjects treated, for example, were air pollution, aviation, computers, excavation, freight, ferries, landscape architecture, new towns, noise abatement, population shifts, railroads, residential growth, shopping centers and space travel. These were in addition to old standards such as street design, driver education, drunken driving, freeways, land use, maintenance and signal systems.

In an editorial introduction of the issue of the Quarterly celebrating the Golden Anniversary of the Eno Foundation and the Silver Anniversary of the Quarterly, the Board of Directors wrote:

*We have been sensitive to the changing climate in economics, utilization, and psychology with respect to roles of the several modes. We acknowledge the need for a new environment for and by transportation. We recognize that wise policies, goals, programs, and priorities are the essence of good transportation services. We*

*admit that waste, duplication, and obsolescence, accidents, congestion, and unconscionable delays, together with the associated air, noise and litter pollution, assiduously harm the common welfare and propagate inflation, ill health, and ecological damage.*

The Eno Foundation had been sensitive and responsive to these changing conditions during all of the half century, the directors said, and added:

*It has met change with change—but with no change in basic philosophy, for the Founder's philosophy was to meet change with change. The purpose can be summed up very simply: it is to research, to educate, and to promote use of relevant knowledge, all within the broad framework of transportation and in concert with the total effort in this context . . . Our mandate for 50 years is broad enough for the Foundation to direct its resources to the needs of the time.*

### **Publishes Sophisticated Studies**

Under the chairmanship of Wilbur Smith, beginning in 1965, Eno Foundation publications emphasized such subjects as the national problem of traffic safety, roadside hazards, speed enforcement policies and practices, zoning, and poisson distribution of traffic—re-examining problems that were covered in earlier years. The Quarterly went on to more sophisticated studies such as environmental protection, regulation of air transport, revitalization of central business districts, energy conservation, improving air quality, subsidized mass transit, effects of population shifts, computerized research, commuter behavior patterns, and the transportation problems of the elderly, low income and minority groups.

In the wide scope of interest were such studies as school crossings, underground garages, faulty vision of drivers, turnpike fog, slow-driving problems, teenage courts, highway landscaping, jitneys, helicopter traffic reports, piggyback express, and computer simulation. Also, roadside advertising, wet pavement accidents, carpooling, wrong-way driving, night vision, travel needs of women, the proposed tunnel under the English Channel, and the influence of smoking and splitting headaches on accident statistics.

### **Who Writes and Who Reads Quarterly**

Quarterly contributors come from a wide variety of disciplines. Authors include public officials, administrators and engineers at all levels of government; officials and consultants in architecture, planning and engineering; faculty members of university public health, economics, political science, and history departments; graduate students and researchers; and heads of associations with traffic interests. Authors also include Supreme Court justices, ambassadors, governors, mayors, traffic experts here and abroad, and unknowns with interesting ideas.

The mailing list of the Quarterly is equally diverse. The Foundation distributes about 4,000 copies in the United States, half of them going to government and public officials who include governors, highway commissioners, more than 400 mayors, city managers and planners; and large-city traffic and police personnel. More than 1,000 copies go to private firms and associations engaged in engineering and architectural services connected with transportation. Several hundred go to libraries and educational institutions. Many other copies are sent to law firms, Chambers of Commerce, and municipal associations.

Over 1,000 copies are shipped outside the United States and distributed one-third to governments, one-third to universities and libraries, and one-third to private companies and individuals engaged in transportation activities. Approximately one-fourth of foreign mailings go to Canada and other nations of the Americas, one-half to Europe, and the remainder is divided among the continents of Africa, Asia and Australia. Transportation folk as far away as Tokyo and Bombay are Quarterly fans.

### **Eno Foundation Foots the Bill**

No income is derived from the publication by the Foundation or the contributing authors. Every issue since January 1947 has been distributed at no cost to recipients and no compensation to contributors. Despite the fact that the Foundation does not pay for manuscripts, some of which are solicited and some voluntary, the number of high quality papers submitted is far more than the space available. The number of journal copies distributed is also limited within the budget of the Foundation.

The Eno Foundation receives requests for specific publications, or for information on transportation problems. The staff responds whenever possible with direct answers, appropriate available literature, or reference to other sources and agencies.

### **The Best Days for Parking**

When communities, agencies or individuals start looking for transportation advice, many of them turn to the Eno Foundation for help. Examples: A Toronto downtown association wanted to know whether there were any parking meters that sounded a signal when the time expired. (None was found.) Officials at Anchorage, Alaska, inquired on how to make a parking survey. The Foundation obliged with a book on the subject. *The Tampa Tribune* asked how many off-street parking places are required for various business. The answer was, one for every three hotel rooms, one for four hospital beds, one for each ten restaurant seats, and one space for every 200 square feet in retail stores.

An often asked question is, "How far will a short-time parker walk?" The Foundation's reply: "In a small town he will double park rather than drive to a vacant spot three spaces away. In most large cities he won't walk more than 500 feet except for special event attractions. In New York he will park outside the city and then take public transit or a taxi."

Queries from correspondents have been known to initiate the writing of whole books on little known solutions to transportation problems. As a result of one such request, Edmund R. Ricker of the New Jersey Turnpike Authority, with stopwatch and tape measure in hand, visited parking garages in a dozen states, then wrote the first comprehensive treatise on the planning, functional design, and operation of parking garages.

Among foreign queries was one from Madrid, Spain, on pedestrian protection; from Rio de Janeiro, Brazil, on driver-training data; from St. John's, Newfoundland, on whether pedestrians are more likely to use tunnels or overpasses to cross heavily traveled streets.

### **Viewing Traffic From a Blimp**

Occasionally the Eno Foundation grants research funds to some other agency. *The Saturday Evening Post*, in an illustrated article by Rufus Jarman titled "Traffic Is a Monster" in the January 28, 1956, issue reported:



*One time, Yale's Bureau of Highway Traffic decided to find out how drivers reacted at intersections—how long it took them to start on the green light, stop on the red, and so on. Signals had always been timed more or less by guess. The Eno Foundation put up the money and Dr. Bruce D. Greenshields, now of George Washington University, spent 2 years on this job. He took pictures at intersections with a movie camera geared to a windshield wiper to make 88 exposures a minute. He photographed traffic from the ground and from the tops of skyscrapers.*

*But he wanted to get high enough to make whole panoramic photographs, so he borrowed a helicopter from the Coast Guard. The 'copter vibrated too much. Then he got a navy blimp, complete with crew, from the air station at Lakehurst, New Jersey. That worked fine until one day the crew got one propeller running forward, the other in reverse. The blimp fell from 2,000 feet to 75 feet above the earth before the crew managed to stop its descent.*

*Doctor Greenshield's book, Traffic Performance at Intersections, became a traffic engineering text and he was responsible for more scientific methods of timing traffic signals. The American Statistical Association compared it with "the first mathematical studies of nuclear physics."*

### **'Monster' Meeting Draws a Crowd**

The Jarman story pointed out that many Eno study projects were inspired by Wilbur Smith, the Foundation's technical advisor who also was a lecturer at the Yale Bureau of Highway Traffic. As one of the speakers commissioned by the Foundation to help cities modernize traffic regulation, Smith arrived at Ottawa in a howling snowstorm. He was fearful that nobody would come out in such weather, but more than 200 business and civic leaders showed up—more than had been invited! His audience was acutely aware that the traffic "monster" could either enrich or ruin their business districts. They were hungry for the long view that only the Eno Foundation had the time, expertise and money to offer. "It is the main fount of pure research," author Jarman wrote, "and it has become so important in its field that people consider it the oracle of traffic as far away as India, where they still drive elephants."

### **Chairmen Are Chief Editors**

The Quarterly has had two Editors-in-Chief, Colonel Goetz and Wilbur Smith, the successors to Mr. Eno as Chairmen of the Board of Directors. Goetz served until his death in 1965; Smith has been Chairman ever since.

Professor Ellard was Executive Editor for all issues through 1959. Associated with him on the staff in the beginning were three Associate Editors: Upham, Smith and LeCraw. Mary Briody and Charlotte Munger were Editorial Assistants.

LeCraw, a graduate of Georgia Tech and the traffic engineering course at Yale, continued to contribute to the Quarterly after leaving full-time service with the Eno Foundation. Some of his monographs were co-authored by Wilbur Smith. LeCraw, as a result of his writing, became one of the leading sources of information on automobile parking in the United States. Following his commissioning from ROTC at Georgia Tech, he maintained an intense interest in the military and rose rapidly to the rank of Major, and finally General, in the Army Reserve. Currently he is a civilian consultant to the U.S. Army's transport and logistics division.

LeCraw was succeeded on the Quarterly staff in 1951 by Edward Mogren, a graduate of Yale and a technical journalist. When he left



the Eno organization to join the Automatic Signal Corporation at Norwalk, he was succeeded by Robert E. Schmidt, a Yale graduate who continued to carry on within the scope established by LeCraw and Mogren.

Maxwell Halsey was added to the magazine staff when he joined the Eno Foundation as Traffic and Safety Engineer in April 1956, remaining until August 1958. Formerly on the faculty of the Yale Bureau of Highway Traffic Control, Halsey was a member of the Board of Consultants before taking a salaried position. Halsey and Schmidt overlapped 1 year before Schmidt left for another position, reducing the number of Associate Editors again to three. In the same year Nancy V. Hillory joined Miss Briody and Mrs. Munger temporarily as Editorial Assistants.

Ethel L. LeLeu came to the Eno clerical staff in 1958 and also became an Editorial Assistant. Halsey left the Eno organization in 1958, reducing the number of Associate Editors to two: W. Smith and Upham. Miss Briody retired from staff duty in 1959, leaving Mrs. Munger and Mrs. LeLeu as the Editorial Assistants.

Professor Ellard retired from New York University in 1962 and gave up his part-time Eno work to become a journalism consultant in Arizona. In the same year Mrs. Munger was promoted to Executive Secretary of the Quarterly and took over many of the activities formerly assigned to Ellard. Directors took note of Ellard's departure at their August 1961 meeting and expressed appreciation for his 19 years of valuable service as Executive Editor of the Foundation's publications.

Following a stroke, Colonel Goetz was in a comatose condition for a year, unable, of course, to attend to any responsibilities. He continued to hold the title as Chairman of the Foundation's Board of Directors, but Wilbur Smith was elected President to take over executive management. He also became Chairman after Colonel Goetz died in 1966. For the October 1965 issue of the Quarterly only three staff

*Photographed at the Eno Foundation Board of Consultants meeting in 1969 (left to right) are: Grant D. Mickle, Executive Vice President, and E.H. Holmes, Director of Policy Planning, of the Eno Board of Consultants; Victor Keppler, Director and President of Famous Photographers School, and David K. Witheford, Technical Director and Editor, Eno Foundation for Transportation.*



*Eno Foundation staff (August 1977); front row, Mary Lou Long, Fred Hurd, Mary Reed, and Bob Holmes; second row, Gene Romano, Bob Weant, Andy DiProspero and John Cummings.*

persons were listed in the masthead: Smith, Upham and Munger. In 1967 Upham resigned, leaving only Smith as Editor-in-Chief and Munger as Executive Secretary. They were joined the next year by David K. Witheford, a Yale graduate and Staff Engineer of the Eno Foundation who doubled as Technical Editor.

At the beginning of 1969 the editorial staff listed only two persons, Smith and Witheford. When Witheford left and was not replaced the number was down to one: Chairman-President and Editor-in-Chief Smith. He had the support, however, of Mrs. Munger, who was then Secretary and Treasurer of the Eno Foundation and a valued member of the Board of Directors.

By 1973 Editor Smith was joined by his former Yale faculty colleague Fred W. Hurd, Technical Editor, and Elinor H. Rehnberg, Editorial Assistant. Hurd was the most experienced member of the Quarterly staff up to that time. He was Director of the Traffic Bureau at Yale and at Pennsylvania State University before his retirement to part-time work at the Eno Foundation. George E. Kanaan, a promising young engineer, was hired as full time Assistant Technical Editor. Mrs. Munger retired from the staff of the Eno Foundation in 1973, but continued as Secretary and Treasurer of the Board of Directors.

Feeling that the Eno Foundation needed a full-time executive in residence, Chairman-President Smith asked the Board of Directors to elect a President to take that role. While Smith remained as Chairman, Robert S. Holmes, a member of the Board, was elected President of the Foundation. The staff of the Quarterly then included Smith, Editor-in-Chief; Holmes, Managing Editor; Hurd, Technical Editor, and a new Editorial Assistant, Mary Louise Long.

John J. Cummings, a journalist from Michigan who spent most of his professional life as an editor for the Automobile Manufacturers Association in Detroit, retired and joined the Quarterly staff as a replacement when Hurd resigned as Technical Editor. Cummings died in 1979 and was succeeded by Robert A. Weant, who since 1975

had been the Foundation's Staff Engineer.

Mr. Weant still holds the title of Technical Editor of *Transportation Quarterly*. He has also served as the Eno Foundation's Director of Research and is currently Vice President for Technical Services. He was 30 years old when he joined the Eno Foundation staff January 1, 1975, as Staff Engineer. Before he was employed by Eno President Holmes he was Deputy Director of the American Association of State Highway and Transportation Officials in Washington, D.C.

He was born in Mineral Wells, Texas, and raised in the Kansas City, Missouri, area. Educated at various schools in Missouri, Weant graduated from Finlay Engineering College in Kansas City in 1967 with a Bachelor of Science degree in Civil Engineering. He later did postgraduate work in journalism at the University of Missouri. He was first fascinated by transportation engineering as student chapter President of the National Society of Professional Engineers at Finlay.

A chapter guest speaker from the Missouri State Highway Commission offered him a job that required only 20 hours a week during his senior college year. After graduation, he accepted a full-time position with the Highway Department as an urban highway designer. He was with the Department until 1971 when he accepted an offer with the American Association of State Highway and Transportation Officials in Washington, D.C. He became Deputy Director of the Association and Assistant Editor of its official publication, *American Highways Magazine*.

In 1974, during an austerity period when highway departments were cutting back on support of the officials' association, the Executive Director of the organization, Henrik E. Stafseth, who was also a member of the Eno Board of Consultants, recommended Weant for a staff position with the Eno Foundation. Since joining the Foundation, Weant has edited and contributed to numerous studies and articles on transportation problems and issues. He has written or co-authored several Eno publications and is technical editor of the *Transportation Quarterly*. Weant is a participating member of the Institute of Transportation Engineers, Transportation Research Board of the National Academy of Sciences, the National Parking Association's Parking Consultants Council, and serves on the Board of Trustees of the Parking Industry Institute.

Mr. Weant and his wife (Judith Ann Ferguson) met and married while both were working for the Missouri Highway Commission in Jefferson City, Missouri. They have three children, two sons and a daughter. Mr. Weant is active in youth training and other civic affairs in his hometown of Milford. He was President (1979) and Chairman (1980) of the Milford Jaycees who were ranked as the No. 1 Jaycee chapter in Connecticut and No. 8 in the United States.

Mr. Weant had gained considerable experience assisting Hurd and Cummings with Eno publications before officially succeeding the latter as Technical Editor in 1979. The rest of the editorial staff that Spring consisted of Chairman Smith, Editor-in-Chief; President Holmes, Managing Editor, and Loring N. Winkles, Editorial Assistant. Mrs. Winkles was succeeded in the Fall of 1979 by Bernice M. Tang, in the Spring of 1980 by Mary M. McCaskey, and in the Fall of 1980 by Ann S. Potter, who was on staff until 1984.

Angela D. Miccinello joined the Quarterly staff in the Spring of 1984 with the revived title and expanded duties of Associate Editor. In this position, she participates not only in the production, as the editorial assistants had done in the past, but also in creative writing and editing tasks. She is responsible for establishing and maintaining liaisons with contributing authors, graphic artists and printers. Prior

to her association with the Eno Foundation, she was employed as a documentation production specialist at TSI International (a computer software company) and as a promotion assistant with *Golf Digest* and *Tennis* magazines.

Mrs. Miccinello was listed in the roster of Outstanding Young Women of America in 1979, the year she graduated magna cum laude from Sacred Heart University, Fairfield, Connecticut, where she majored in English and history and minored in media studies. As part of her course, she was involved in an independent study program in which she established and maintained a Public Relations Department for Cooperative Educational Services, a regional educational center. She was responsible for developing news releases on educational programs and services sponsored by the agency. From 1979 to 1980 she studied graphic arts at Fairfield University. She resides in Milford, Connecticut, with her husband, Daniel, and their daughter.

The rest of the Quarterly staff remained unchanged with Board Chairman Smith as Editor-in-Chief, President Holmes as Managing Editor, and Weant as Technical Editor until 1986. In that year Roland A. Ouellette succeeded Holmes as President of the Foundation and Managing Editor of the Quarterly.

#### ***Now Transportation Quarterly***

With the issue of January 1982 the name of *Traffic Quarterly* was changed to *Transportation Quarterly* to reflect the broadening extent of the magazine's fields of interest. The new title was also more compatible with the change of name from Eno Foundation for Highway Traffic Control to Eno Foundation for Transportation, Inc., which occurred in 1968.



## CHAPTER 20

# The Foundation Under Smith

When the Eno Foundation Directors held their annual meeting February 7, 1966, Earl Campbell made a motion to reelect Wilbur Smith as President and also to elect him as Chairman to succeed the late Colonel Goetz. Other Directors also were reelected. They were: Upham and Kelsey, Vice Presidents; Briody, Secretary and Assistant Treasurer; Munger, Treasurer and Assistant Secretary; and the two new members, Campbell and Barnes.

Mr. Smith was the first transportation professional retained to carry on Mr. Eno's work. As a South Carolina traffic engineer in the mid-1930s he was selected by Mr. Eno as one of the 230 "Counselors of the Eno Foundation." When Smith went to Yale University in 1943 as a Professor and Associate Director of the Bureau of Traffic, Mr. Eno employed him as a part-time Traffic Engineer and Advisor for the Foundation. Smith later served on the Board of Consultants, on the Honorary Advisory Council, and was elected a member of the Board of Directors, which then elected him the first and only Third Vice President. When Chairman-President Goetz suffered a long, incapacitating illness, the Board of Directors chose Smith, a resident Director, as principal administrator of the Foundation. When it became evident that Colonel Goetz would not recover, Smith was elected President and Colonel Goetz was reelected Chairman in 1965.

The business of the February 1966 meeting was transacted with as much momentum as when Colonel Goetz was alive. Chairman Smith announced that the Eno Foundation would publish and distribute papers presented in the symposium, "Traffic Safety, A National Problem," at the second annual meeting of the new and prestigious National Academy of Engineering. The Directors voted a fellowship in traffic planning at West Virginia University, a grant in support of printing costs of two highway research reports (*Highway Safety* and *Night Visibility*), and a contribution to help reduce the operating deficit of the Yale Bureau of Highway Traffic, then under the direction of Fred Hurd.

### Smith Follows Eno, Goetz

Eminently qualified, Smith was unanimously elected to the dual position of Chairman and President held previously by Mr. Eno and Colonel Goetz.

Mr. Smith was also President and Chairman of Wilbur Smith and Associates, which *The Engineering News Record* said in 1964 was "generally conceded to be the world's largest traffic consulting firm." The company of consulting engineers, planners and architects provided services in public and private transportation, urban and regional planning, highway and structural design, parking studies, and related undertakings.

### **Circuitous Route to Traffic Vocation**

Born in 1911 in Columbia, South Carolina, Wilbur Smith was the eldest of four sons of a railroad conductor father and a devout mother. His childhood ambition was to become a doctor, but he gave up that idea when he encountered the high school nemesis of Latin, a prerequisite to medical study. On the other hand, he became enamored with mathematics, which steered him into pursuit of a college major in electrical engineering.

A Phi Beta Kappa scholar, he was graduated magna cum laude from the University of South Carolina with a Bachelor of Science degree in 1932. This was a deep Depression year, and young Smith was unable to find a job. So he returned to the University and earned a Master's Degree in Electrical Engineering while operating the institution's observatory one night each week for \$5 a month, which helped pay his \$20-a-semester tuition.

With two degrees in electrical engineering in hand, Mr. Smith was hired by the South Carolina State Highway Department to stamp metal license plates for automobile drivers. His first chance to exercise engineering skills came when he was temporarily assigned as a rodman with a survey party. After that tour he was transferred to the testing laboratory to inspect steel, cement and other road building materials. He was there through the second summer following graduation.

About that time the state of South Carolina received a federal appropriation to conduct a rural electrification survey. Since Smith had written his Master's thesis on "Rural Electrification in South Carolina," he was chosen to help with the project. When he concluded this work it was back to the highway department testing laboratory.

The break that really shaped his future came when South Carolina received federal backing for a statewide traffic safety survey. Having had recent experience in survey work, he was selected as Associate Director for the traffic survey even though he had never received formal traffic training.

### **William Powell, First Traffic Teacher**

William Powell of Buffalo, New York, was appointed by the U.S. Bureau of Public Roads to conduct the survey. Recognized as a pioneer and outstanding authority in traffic engineering, he was by profession an industrialist and industrial engineer. He had acquired most of his traffic expertise tangentially in connection with his wide range of civic participation.

Mr. Powell made an immediate impression on Smith when he arrived in South Carolina driving a Pierce Arrow, the quintessential automobile of the day. "We did the statewide survey," Smith said later, "taking hundreds of people off relief to help. It was one hell of a survey. Powell was a fine, top-level person and engineer. I developed a deep personal and professional respect for him. He primarily got me interested in traffic and taught me all I knew about it." The experience ignited a flame of enthusiasm, fascination and interest in traffic that consumed Smith's vocational attention the rest of his life.

After the year-long traffic survey ended, Smith turned down an opportunity to become an electrical engineer with the new South Carolina Rural Electrification Authority. He had another choice. The State Highway Department's leadership decided the time had come to have a State Traffic Engineer. When Smith was offered the position he accepted without hesitation. Up to that time most traffic engineering and planning had been performed without regard for scientific basis.



### **S.C.'s First State Traffic Director**

As first Director of Traffic Engineering of the South Carolina State Highway Department, Smith successfully lobbied the General Assembly to adopt a compulsory highway accident reporting act. He also headed campaigns to improve highway sign and marking systems, as well as to identify and correct hazardous highway situations. He had been on the job only a few months when, with the blessing of the Highway Department, he successfully applied for a fellowship to study in the Bureau of Street Traffic Research at Harvard University. After completing his study he returned to work at the South Carolina Highway Department in June 1937. Starting with a one-man unit—himself—he activated the accident reporting system, set up the state's first traffic engineering division, put plans in motion for the first use of a computer by a state highway department, established a uniform program of traffic control devices, accepted membership in the National Committee on Traffic Control Devices, and increased the personnel of the traffic engineering division to 30 employees.

### **Yale Research and Professor**

In 1941 he took a year's leave of absence to do a research project on the economics of motor vehicle transportation with the Bureau of Highway Traffic at Yale University, formerly the Bureau of Street Traffic Research at Harvard. It was while Smith was on this Alfred P. Sloan Foundation fellowship that he met Mr. Eno, "the granddaddy of traffic engineering," who was then 83 years old. Their common interests in traffic sealed an immediate friendship, and Mr. Eno appointed Smith as Technical Advisor of the Eno Foundation for Highway Traffic Control.

Before Smith went to Yale on the Sloan fellowship, his traffic engineering division was under the State Highway Department's Maintenance Department, headed by Kinsler ("Cayce") Beckham, which already had charge of marking and signing roads and keeping accident records. Upon returning to Columbia, he upgraded the division to the Department of Traffic Engineering, putting it on a par with the other departments of the Highway Department.

By this time, however, World War II priorities and limitations had reduced civilian traffic engineering work to a minimum. Smith left the Highway Department permanently in 1943 to return to Yale as Professor and Associate Director of the Traffic Bureau at the University. World War II conditions forced Yale to suspend its normal traffic training program, so Smith engaged in a heavy schedule of war-related transportation activities. These included lecturing at Clemson College (now University) and the University of South Carolina, acting as a consultant on transportation for the Office of Civil Defense, and coordinating traffic studies and transportation theory classes for the Federal Bureau of Investigation of the U.S. Department of Justice.

His FBI classes were attended by law enforcement executives from states, counties, cities and federal agencies. After the war ended he continued with the FBI as consultant and lecturer on transportation planning and traffic control at the National Police Academy until 1963.

### **Academia vs. Traffic Consulting**

Yale's Traffic Bureau returned to a normal schedule after the war. As the understudy of the Director, Theodore M. Matson, Smith at the age of 35 was thoroughly committed to an academic career. In line with Yale's faculty policy of professors' maintaining practical experi-

ence in their respective disciplines, Professor Smith and Director Matson participated in part-time traffic consultation in New England and New York. Smith's instinctive ambition was to become head of the Yale Bureau, but he realized that Director Matson, his contemporary, had the prospect of 25 more years in that position before retirement. He looked for other options for his future.

### **Fascinated by New Field**

Fascinated by his introduction to consulting, he established a partnership with Wortham Dibble, who had served the state of South Carolina with Smith as Assistant State Traffic Engineer and had just returned to civilian life from military service. He took charge of the Smith-Dibble and Company office in Columbia, South Carolina. He directed the Southern end of the firm's operations while Smith handled contracts in the Northeast, working in spare time from the company's small office near the Yale campus in New Haven. Smith was assisted by other Yale faculty members and by students on a part-time basis. The successful Smith-Dibble operation lasted 6 years and ended in 1952.

### **Wilbur Smith and Associates**

Before 1952 closed, Smith had opened a new traffic consulting firm, a proprietorship called Wilbur Smith and Associates. Chartered in Delaware, it had headquarters in New Haven and a principal office in Columbia.

Matson was still Director of the Yale Traffic Bureau when he died suddenly and unexpectedly on December 15, 1954. By that time Smith was committed to a career in traffic consulting. "I liked the diversity," he said later, "the challenge, the variety and the basic interest of professionally working with colleagues and clients." He declined the invitation from Yale to succeed Matson as Director of the Bureau, but agreed to be Acting Director until the permanent Director was named.

Ever since the early days of Wilbur Smith and Associates, other companies had made overtures for a merger, but all were rejected. When Smith approached the age of 70 in 1981, however, he began to listen to proposals.

On January 16, 1981, Wilbur Smith and Associates became an autonomous subsidiary of Armco, Inc., through an exchange of stock. Armco, Inc., of Middletown, Ohio, the sixth largest steel producer in the United States, was engaged in a program of diversification into fields of manufacturing, oil and gas exploration, metal fabrication, mining, finance, and engineering and consulting. In 1986, officers and employees of Wilbur Smith and Associates bought back the company from Armco, reverted it to an independent firm rendering its historical services, and renamed it Wilbur Smith Associates.

### **Recipient of Many Honors**

Smith has received many honors, including a Doctor of Humanities Degree from Lander College in Greenwood, South Carolina. Among other honors are: Doctor of Law degree from the University of South Carolina (1963); University of South Carolina's Distinguished Alumnus Award (1968) and the prestigious Algernon Sullivan Award (1978); Transportation Research Board's Roy W. Crum Award (1981); Duke University's School of Engineering Distinguished Service Award (1982); the Burton W. Marsh Distinguished Service Award (1982) of the Institute of Transportation Engineers; the Highway Division Award (1983) of the American Society of Civil Engineers (an annual tribute now known as the "Wilbur S. Smith



Wilbur S. Smith

Award"); American Society of Civil Engineers' Highway Division Award and Forty-Year Service Award (1983); the George S. Bartlett Award (1985) of the American Association of Highway and Transportation Officials and the American Road and Transportation Builders Association; the NSPE Award (1985) of the National Society of Professional Engineers; and the P.D. McLean Memorial Award (1985) of the Road Gang in Washington, D.C.

Also, he was recognized as "Engineer of the Year" by both the South Carolina Society of Professional Engineers (1964) and the South Carolina Section of the Institute of Transportation Engineers (1976). He received honorary life membership in the national Institute of Transportation Engineers. He was elected an honorary member of the Institute of Transportation of the American Public Works Association. He is an honorary life member and former Chairman of the Executive Committee of the APWA Highway Division, and former Chairman of the National Transportation Policy Committee of the American Society of Civil Engineers.

Mr. Smith is a past President of the American Road and Transportation Builders Association, Institute of Transportation Engineers, Theodore M. Matson Memorial Fund, and South Carolina Safety Council. He is a former Chairman of the Transportation Research Board of the National Academy of Sciences and the University of South Carolina's Chair Endowment Club. He was formerly a member of the Distinguished Practitioner-Lecturer Program of the College of Business Administration at the University of Georgia. He has been listed in the Marquis *Who's Who in America* since 1958 and also in "Who's Who" books on the East, Finance and Industry, South and Southwest, the World, and Engineering, and London's "Dictionary of International Biography."

Mr. Smith is a Fellow of the American Consulting Engineers Council and also participates in similar organizations in the United Kingdom, Australia, New Zealand and Hong Kong. He is a member of the National Academy of Engineering, International Road Federation (former member, Board of Directors), American Society of Safety Engineers, Institute of Electrical and Electronics Engineers, and the National, New York and South Carolina Societies of Professional Engineers. He has served as a trustee of the University of South Carolina Business Partnership Foundation, the South Carolina Research Authority (Chairman of the Parks Management/Development Committee), Presbyterian College, and a member of the South Carolina State Wildlife and Marine Resources Commission and the following organizations: Board of Directors of the National Safety Council, the South Carolina State Chamber of Commerce, Highway Users Federation for Safety and Mobility, Educational Foundation of the University of South Carolina, Lander College Foundation, the Advisory Board of the Salvation Army of the Midlands, the Dean's Council of the School of Engineering at Duke University, President's National Advisory Council of the University of South Carolina, NASA Shuttle Operations Strategic Planning Group, the National Advisory Board of the Institute of International Studies at the University of South Carolina, the Editorial Advisory Board of *Traffic Engineering and Control* (Britain) and the Peer Committee of the National Academy of Engineering.

In addition to numerous technical reports published by the Eno Foundation, writings of Smith include co-authorship of the textbook, *Traffic Engineering*, with Matson and Hurd, published by McGraw-Hill (1955), and *State-City Relationships in Highway Affairs*, with Norman Hebden, published by Yale University Press, 1950, and authorship of many articles published in technical and professional

journals.

Mr. Smith has been referred to by various writers as “Lincoln-esque” largely because he and the Civil War President were slender and tall, both measuring six feet four inches. He has addressed audiences in most of the large cities of the United States and in numerous foreign countries before native and international audiences.

Smith is a registered professional engineer in all fifty states, the District of Columbia, the United Kingdom, New Zealand, Hong Kong, and the State of Queensland in Australia.

### **Mrs. Munger’s Quarter Century**

Another highlight of the February 1966 Board meeting was recognition of Mrs. Munger’s completion of 25 consecutive years of staff service to the Eno Foundation. She was presented with a cash honorarium, an appropriate wall plaque, and a resolution. The resolution pointed out that she joined the Eno organization December 8, 1941—the day after the Pearl Harbor attack—and was “an extremely capable” member of the staff, “giving of her time and talents willingly and unstintingly in every area of endeavor. In great measure the success of the Foundation is due to her untiring efforts.”

Charlotte Munger, the childless widow of Edgar Stillman Munger, retired as an employee on January 1, 1969, after 27 years on the Eno staff, but she remained on the Board of Directors as Secretary and Treasurer of the Eno Foundation until her death July 4, 1985, at the age of 82.

Mrs. Munger, a native of Weehawken, New Jersey, was a graduate of Norwalk, Connecticut, High School. She was employed in New York City by the Federal Trade Commission and the Babson Company before she started working for the Eno Foundation as Secretary to President Tilden. Her first residence in Saugatuck was in an apartment above the barn on Mr. Eno’s Judah Rock residential property across the street from the Foundation’s headquarters. She was active in all phases of the Foundation’s operation and lived to see the “Computer Age” arrive in support of Eno publications. She was popular among all members of the staff and Boards of the Eno Foundation. One of her peers said of her: “Charlotte was always alert, responsive and attuned to the background and history of the Foundation as it related to the many important decisions made during her career on the Board of Directors.”

After retirement from the staff, Mrs. Munger continued to be an active and enthusiastic officer of the Board of Directors. Mrs. Munger was an avid reader with special interest in politics. In retirement she kept busy in volunteer work with the New Haven Historical Society, Spanish-speaking patients at St. Raphael’s Hospital (New Haven), and for 3 years was a teacher of English as a second language.

The Eno Foundation’s universal nature was emphasized at the annual meeting of the Directors a year later, February 6, 1967, when the members were assigned to foreign conferences: Chairman-President Smith to represent the Foundation at the International Union of Public Transportation in Barcelona, Spain; Director Barnes to assume that role at a Middle East meeting of the International Road Federation in Beirut, Lebanon; and Director Campbell to present a paper at the tenth Pan-American Highway Congress in Uruguay.

### **Harold Hammond Joins Eno**

At the 1967 annual meeting, officers elected were: Smith, Chairman and President; Kelsey, First Vice President; Briody, Second Vice President; and Munger, Secretary and Treasurer. Other Direc-

tors were Campbell and Barnes.

The election of Harold Francis Hammond to succeed the late Charles Upham as the seventh member of the Board had a significant and lasting impact on policies and performance of the Eno Foundation. Except for Chairman Smith, he was the senior Director in point of service and Secretary and Treasurer until he retired to the Honorary Board of Directors in the Spring of 1988. He spent his professional career in transportation, being very active in various transportation organizations and holding several of the most prestigious positions in the transportation field. He was a contributing author to an early edition of the authoritative ITE *Traffic Engineering Handbook* and other traffic and transportation manuals.

Born in Lynch, Nebraska, on June 1, 1908, he attended Parsons College at Fairfield, Iowa, and transferred to the University of Michigan where he received his Bachelor of Science degree in Civil Engineering in 1930. He received the Master of Science degree from Harvard University in 1931, the year he married Gertrude R. Rouse. They are parents of a son and a daughter.

Mr. Hammond started his traffic engineering career on the Massachusetts Governor's Commission on Street and Highway Safety, 1931-1934; was traffic analyst for the Traffic Audit Bureau headed by the famous pioneer traffic expert, Dr. Miller McClintock, 1934-1935; directed the Traffic and Transportation division of the National Conservation Bureau, 1935-1944; managed the Washington office of the American Transit Association, 1944-1947; was assistant manager of the Transportation and Communication Department of the U.S. Chamber of Commerce, 1947-1948, and manager, 1948-1955.

Mr. Hammond joined the leadership of the Transportation Association of America in 1955 as a Director and Executive Vice President, and in 1962 became President, the position he held when elected an Eno Director. He retired from TAA in 1973.

In addition to Mr. Hammond's employment record, he was transportation consultant for the naval operating base at Norfolk, Virginia, and the Office of Defense Transportation in the wartime years of 1940-1944. He also served on advisory councils of the Bureau of the Budget and the Department of Commerce. He was a member of the Montgomery (Maryland) County Council, 1949-1954, and President the last 2 years.

Mr. Hammond is a registered professional engineer, Past President of the National Institute of Traffic Engineers, founder of the American Society of Traffic and Transportation, and a member of the American Society of Association Executives. He served as the sole Vice President of the Eno Foundation between 1974 and 1985, afterwards assuming responsibilities of Secretary and Treasurer until his retirement.

He attended his first Eno Directors' Board meeting on April 25, 1967, and in November of that year the Foundation realized one of the principal goals of the Smith administration: the first Joint Board of Consultants Conference was held, initiating a regular annual event on the Foundation's calendar.

At the November 1967 Board meeting, Holmes was elected to the Board of Consultants to succeed General Louis W. Prentice. Holmes was General Manager of Construction Marketing of U.S. Steel. His election was the first step in an affiliation that was to lead to Holmes' service as a Director, President and Vice Chairman of the Eno Foundation.

### **New Name—Eno Foundation for Transportation**

In May 1968 the bylaws were amended to change the name from

Eno Foundation for Highway Traffic Control to Eno Foundation for Transportation, thereby identifying the Foundation's expanded scope of interest in transportation.

Miss Briody retired as an active Director and Second Vice President at the May 1983 meeting of the Board and was elected to the Honorary Board of Directors. She became a private secretary for William P. Eno in 1912 and continued in that position until his death in 1945. She then became a full-time employee of the Foundation concerned primarily with accounting and financial affairs. On the Board of Directors, she served as Secretary, Treasurer, and finally as a Vice President. After retirement from Foundation employment she lived with relatives in Norwalk, Connecticut, until her death May 5, 1969.

Her successor as a Director was K. Martin Purala, Certified Public Accountant and long-time financial adviser to the Eno Foundation.

Henry Barnes, who succeeded the late Colonel Goetz in 1966 as a Director, died September 16, 1968. Holmes was recruited from the Board of Consultants on February 4, 1969, to replace Barnes on the Foundation's Board of Directors.

### **Chapter in the Kelsey Saga**

The Eno Board of Directors held its first meeting outside the Connecticut-New York community when the members gathered at Hilton Head Island on the South Carolina coast, May 16, 1970. This set a precedent for broadening the geographical sphere of executive conferences.

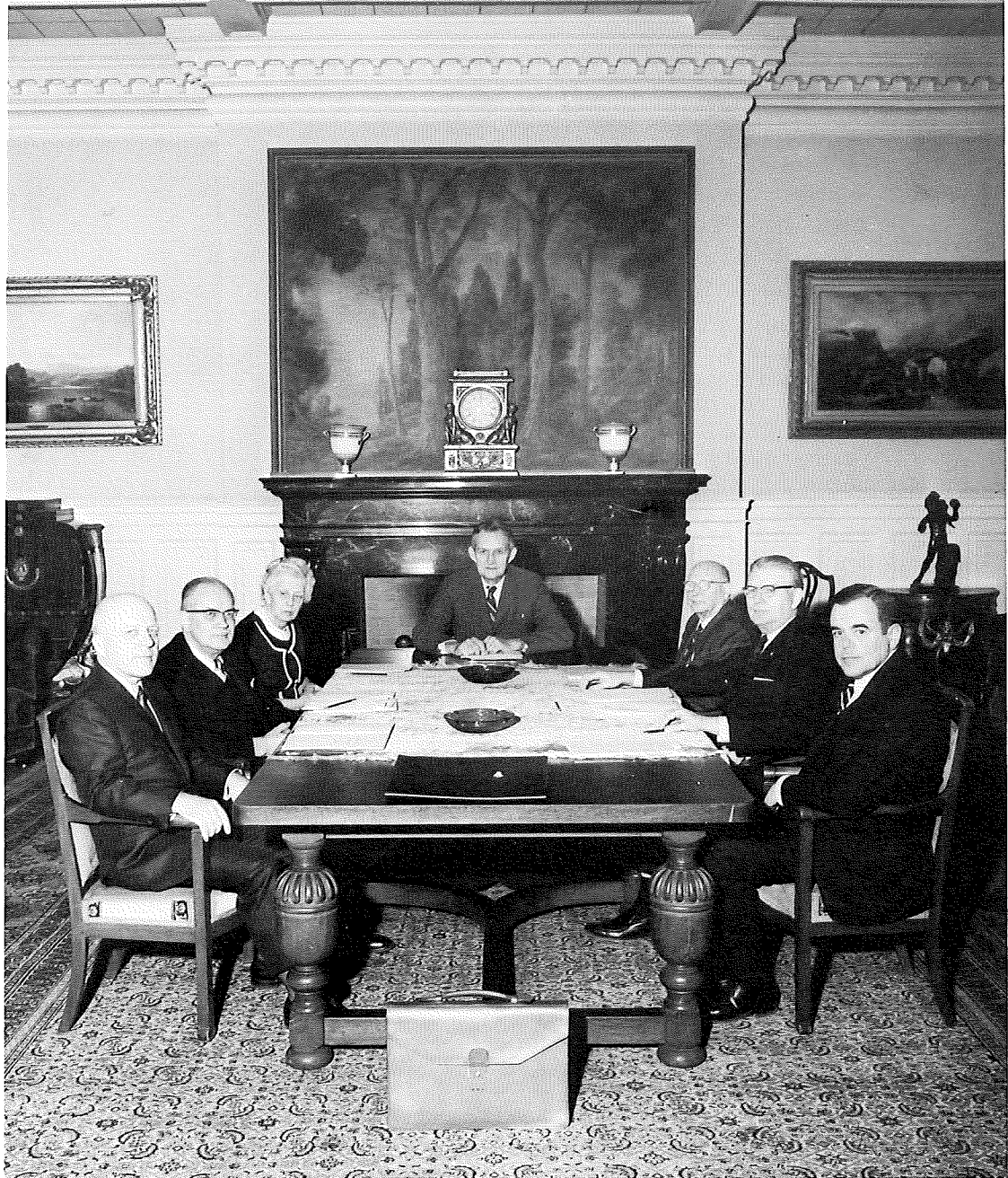
At that meeting, Courtland Kelsey, who had served 24 years as Vice President of the Eno Foundation, and was succeeded in that office by Director Earl M. Campbell, was elected to the Honorary Board of Directors. He was succeeded on the active Board by his son, H. Burr Kelsey, the third generation member in a family succession that spanned the history of the Eno Foundation.

Clarence Kelsey, father of Courtland, was a member of the Eno Foundation Board of Directors from the time the Foundation was organized in 1921 until his death in 1930. He was valedictorian of the Yale University graduating class of 1878 when the runnerup was William Howard Taft, who was elected 25th President of the United States in 1908 and later Chief Justice of the nation's Supreme Court. Clarence Kelsey was an organizer, Chairman and President of the Title Guarantee and Trust Company in New York. He was succeeded on the Eno Board by Fritz Malcher, whom Mr. Eno called "a genius on traffic problems."

Clarence Kelsey's son Courtland, born in 1888, was graduated from Yale in 1909. After earning a degree from New York Law School in 1912, he went to work for a New York City law firm currently known as Cravath, Swaine and Moore. During World War I Courtland Kelsey served with Walker D. Hinds, who was given war-time charge of U.S. railroads. On leaving Mr. Hinds, he joined Simpson, Thacher and Bartlett, a New York City law firm. While there Courtland Kelsey advised Mr. Eno and the Eno Foundation. He helped prepare the Eno Foundation's founding papers in 1921, and was elected Vice President of the Board of Directors in 1942 to replace Charles Tilden. As Vice President he presided when Colonel Goetz was elected Chairman of the Board to succeed the late Mr. Eno. He was Vice President of the Eno Foundation from 1942 until 1968 and presided over the Board of Directors during Colonel Goetz's long terminal illness. Courtland Kelsey died September 29, 1971.

Third in the Kelsey paternal line of Eno Directors was H. Burr Kelsey. Like his grandfather Clarence and his father Courtland, Burr





*Fiftieth anniversary officers and directors of the Eno Foundation posed for this photograph at a 1971 meeting in the conference room of the Foundation's headquarters in Westport, Connecticut. Chairman-President Wilbur S. Smith presides in the center. Other Directors are, left to right: Robert S. Holmes, K. Martin Purala, Charlotte K. Munger (Secretary and Treasurer), M. Earl Campbell (Vice President), Harold F. Hammond, and H. Burr Kelsey.*

had no expertise in the field of traffic engineering, but also like their contributions, his expertness in finance and law was extremely important to the work and growth of the Eno Foundation.

Clarence (1878), Courtland (1909) and Burr (1937) were graduates of Yale. Courtland and Burr were members of Simpson, Thacher and Bartlett, the New York law firm that provided a number of Eno Foundation Directors. Among them were Philip Bartlett, head of the firm and also President of the Eno Foundation its first 9 years, and David Ely, who was Eno Secretary and Treasurer the first 11 years.

Burr Kelsey, whose home is in Montclair, New Jersey, was born July 21, 1915. He graduated from Hotchkiss School in Lakeville, Connecticut, from Yale in 1933 with a major in Economics, and from Columbia Law School of Columbia University in 1940. He was in the

U.S. Naval Reserve throughout World War II with most of his service in the Pacific Theater.

As a member of the Eno Board of Directors, Burr Kelsey renders legal advice and service in the handling of tax regulations, property sales, pensions, and various other matters. He also assumed Secretary and Treasurer duties upon Hammond's retirement from the Board in 1988. He retired from Simpson, Thacher and Bartlett in 1975, but is a very active Eno Director. His main hobby is golf. He and his wife, the former Frances Voorhees, have a son and two daughters.

### **Foundation Celebrates 50 Years**

The Eno Foundation for Transportation celebrated a half century of service October 19, 1971, with a black tie dinner at Hotel Pierre in New York. The principal speaker was the famous German rocket engineer, Dr. Werner von Braun of the National Aeronautical and Space Administration. The Board of Directors, the Board of Consultants and 120 guests were present. *Traffic Quarterly* journal gave special attention to the Golden Anniversary with an overview of the association's 50 years:

*The Foundation has a substantial history of accomplishment. Its resources have been used in aiding education, providing research grants, sponsoring conferences, giving awards, supporting publication of research by others, and carrying out its own publishing and research activities. It is governed by a Board of Directors advised by a Board of Consultants and operated by a small staff of technical and clerical personnel.*

Fiftieth anniversary Directors of the Foundation were: Smith, Chairman and President; Campbell, Vice President; Munger, Secretary and Treasurer; Hammond, Purala, Holmes and H. Burr Kelsey.

*Traffic Quarterly*, started in 1947, observed its twenty-fifth anniversary simultaneously with the Foundation's fiftieth by featuring the anniversaries in its one hundredth issue.

When Ethel LeLeu retired from the Eno staff in 1972, the Foundation placed a blind advertisement in the newspaper for a secretary with bookkeeping experience. Mary I. Reed replied and was surprised to find that the ad had been placed by virtually a next-door neighbor. Her home is within easy walking distance of the Eno Foundation headquarters. She knew Mrs. Wilbur Smith and her daughters, who also lived near the Eno offices, but had never met Mr. Smith.

She was accepted for the job of Executive Secretary and bookkeeper, remaining with the Foundation until her retirement in 1987.

Born in New York City in 1921, she was graduated from Prospect Heights High School in Brooklyn and attended Brooklyn and Hunter Colleges. From 1940 until 1948 she worked for various New York firms such as the Studebaker Corporation, Society of Automotive Engineers, *This Week* magazine, and two other publishers.

In 1947 she married Walt A. Reed, an artist, art historian and art dealer. They went to Europe in 1948 for what they expected to be a 6-month commitment. They stayed 4 years, living in Prague, Czechoslovakia; Helsinki, Finland; Beirut, Lebanon; Athens and Salonika, Greece; and Belgrade, Yugoslavia. While in Helsinki she was secretary to the Mission Chief of the United Nations Children's Emergency Fund (UNICEF).

Before her employment by the Eno Foundation she worked as a secretary for a dance teacher, an inventor, Staples High School, and



an electronics firm. At the Eno Foundation she was Executive Secretary consecutively for Presidents Smith, 1972-1974; Holmes, 1974-1986; and Ouellette, 1986-1987. Most of her work was with finances; she also recorded and wrote the official minutes of the Board of Director meetings.



## CHAPTER 21

# Holmes Becomes Foundation President

Chairman-President Smith felt that the Foundation services had grown so significantly that an on-site executive was needed. He recommended that a resident President be elected to give overall day-to-day supervision. The Board of Directors approved and elected one of their own members, Robert S. Holmes, to the position effective January 1, 1974.

Mr. Campbell resigned as a Director in the meantime and was elected an Honorary Director. Hammond succeeded him as Vice President. Smith continued as Chairman of the Board of Directors.

Bob Holmes, as he was popularly known, retired at the age of 61 as General Manager of Construction Marketing for U.S. Steel Corporation, Pittsburgh, Pennsylvania, to accept Eno's resident presidential responsibilities as chief operating executive.

He was a contributor to *Traffic Quarterly* before he became involved in other Eno Foundation affairs after he was elected to the 21-member Board of Consultants, and was on his second 3-year term when elected one of the seven Directors.

Early in the 1970s, bylaws were amended to limit service on the Board of Consultants to 3 consecutive years, but a past member could be eligible to return after a year's absence. The purpose was to provide wider participation. Up to that time turnovers were few and individual service ranged up to 15 continuous years.

### **New Faces Among Consultants**

"One of the objectives I had when I came on the Board of Directors," Holmes said, "was to reduce repetition of terms on the Board of Consultants. We needed to tap fresh ideas from new people, and to gain greater exposure for the Foundation. So we began appointing seven new Board of Consultants' members each year to serve a 3-year term that they could not immediately extend."

He noted, "The new system brought in more people who became interested in the Foundation and contributed advice and time to its programs. The more recognition we got, the more people wanted to become members on the Board of Consultants."

This limited-tenure plan was part of a program advanced by Holmes to give the Eno Foundation more exposure. He often found that people were familiar with *Traffic Quarterly*, but not with the Foundation and its other activities. A further step in attaining greater recognition for the Foundation was to continue to choose the most prestigious people in their respective fields to author Quarterly articles and Eno-published monographs. Changing the name of the journal to *Transportation Quarterly* with the January 1982 issue also was part of the intent to increase recognition, with a title that more correctly reflected the broad, multimodal interests of the Foundation.

Simultaneous changes in format of Eno-published monographs added to the attractiveness and effectiveness of Eno publications.

### **“Ramblin’ Wreck” From Georgia Tech**

The new President, Robert Holmes, was a native of Lebanon, Tennessee, grew up in Birmingham, Alabama, graduated from Georgia Institute of Technology (Georgia Tech) with a Bachelor of Science degree in Civil Engineering in 1938, and was a student at the Yale University Bureau of Highway Traffic the following year. He was in the Transportation Corps of the U.S. Army from 1941 to 1947, rising to the rank of Lieutenant Colonel. Before the war he was a highway engineer for the Pennsylvania Turnpike Commission, 1939-1940, and Traffic Engineer for the National Conservation Bureau in New York.

After the war he accepted the position of Executive Secretary of the Institute of Traffic Engineers in New Haven, Connecticut, 1947-1951; Chief Highway Engineer of the Federal Civil Defense Administration in Washington, D.C., 1951-1953; Executive Assistant to the President of Wald Industries in Huntington, Pennsylvania, 1953-1956, then was with U.S. Steel in Pittsburgh for almost 18 years. At U.S. Steel he was General Manager of Construction Marketing, a field that covered highways, urban mass transit, and commercial, industrial and residential buildings.

He holds honorary life memberships in the American Society of Civil Engineers and the Institute of Transportation Engineers. He is Past President and a Director of the American Road and Transportation Builders Association; Past President of the Pennsylvania Highway Information Association; a former member of the Highway Users Federation’s Policy Advisory Committee, and former Chairman of the Committee on Transportation Development. Since 1974 he has been organizational representative of the Transportation Research Board.

Mr. Holmes has been active in church and civic affairs wherever he has lived. His social memberships now and earlier include the Union League Club of Chicago, University Club in Pittsburgh, University Club in Washington, D.C.; Wildwood Golf Club in Allison Park (Pennsylvania), and Oronoque Village Golf Club in Stratford, Connecticut. He is an ardent golfer.

He and Mrs. Holmes, the former Maurine Louise Bane, were married in 1945. Their two sons, John Robert and Kenneth Stratton, are businessmen, and their daughter, Mary Jo, is a teacher.

### **Eno Supports Education**

The Eno Foundation in the 1970s was generous in support of agencies and activities related to the enhancement of transportation knowledge. Allotted disbursements included \$21,000 in fellowships for the Bureau of Highway Traffic at Pennsylvania State University; \$100,000 in the name of William P. Eno in support of graduate studies and research in the field of transportation at Yale; ten \$7,000 scholarships at selected colleges and universities; \$100,000 for Westport-Weston YMCA construction to include a pedestrian mall honoring Mr. Eno. In addition, the Eno Foundation donated 14 acres of “inland wetlands” to the Aspetuck Land Trust at Westport. The acreage adjoined the rear of the Eno Foundation headquarters property.

### **Mark Robeson Elected a Director**

M. Earl Campbell, who served as Vice President of the Eno Foundation from 1969 to 1974, when he was succeeded by Harold Hammond, resigned from the Board of Directors. His successor on the Board was Mark D. Robeson, who was transferred from the Board of



*Robert S. Holmes*

Consultants in February 1976 to the Board of Directors.

One of the goals of Wilbur Smith as Chairman-President of the Eno Foundation was to "professionalize" the organization. In the past, Mr. Eno sometimes nominated Board candidates on the basis of friendship or influence unrelated to talents essential to administering the Foundation's activities. Hammond, Holmes and Robeson all had outstanding transportation backgrounds. Burr Kelsey as a lawyer filled an important role on the Eno Board to provide legal advice. And, Director Purala, as a Certified Public Accountant, was the Board's financial adviser. Board member Munger was familiar with the Foundation's history and provided insight and perspective in the Board's deliberations. Chairman Smith, of course, was one of the leading pioneers in traffic engineering as a Yale Professor and entrepreneur-founder of one of the world's leading transportation consulting firms, Wilbur Smith and Associates.

Mark Robeson was born September 6, 1911, at Columbus, Kansas. He received a Bachelor of Arts degree in Political Science from the University of Kansas in 1935. Shortly afterwards he acquired a job as a \$60-a-month messenger for the City National Bank of Kansas City, where he worked himself up to Trust Consultant. His banking activity was interrupted by World War II in which, as a Naval Lieutenant, he served as a gunnery officer in European, African and Asian theaters.

He began his career in the trucking industry as First Vice President of Riss and Company of Kansas City, Missouri, from 1947 to 1953. He owned his own trucking company in Prairie Valley, Kansas, before joining the Yellow Freight System in Overland Park, Kansas, in 1954 as Vice President. He subsequently moved up to become Executive Vice President and Finance Chairman.

As President of the Kansas Motor Carriers in 1953 he spearheaded the fight to repeal the state's ton-mile tax, which the trucking industry said was discriminatory. This success led to his election as Vice President of the American Trucking Associations, later President, and then Chairman (1968-1979).

### **Safety Is Top Priority**

Even though many of Robeson's activities have been on behalf of the trucking industry, he has always felt that all other modes of freight and passenger transport were important to the country. Safety in transportation and traffic was a first priority in his advocacy. He was Vice Chairman of the Highway Users Federation, 1973-1976; and in 1979 he was declared "Transportation Man of the Year" by the Transportation Association of America (TAA).

He was a TAA Director and a member of President Richard Nixon's Transportation Task Force. He has served on the Transportation Committee of the U.S. Chamber of Commerce, as Chairman and President of the Western Highway Institute, and President of the Kansas Safety Council. In the latter presidency he brought overdue reforms to tighten up drivers' licensing procedures, improved driver education, and instituted a modern traffic court system in Kansas.

He was Chairman of the National Safety Council, 1979-1987. Before that time, when he was the Council's Vice President, he was instrumental in the adoption of an educational defensive driving program. More than 10 million persons throughout the nation have taken the defensive driving courses. Robeson was also Chairman of the National Academy of Science's panel on Transportation Options for the Elderly and Handicapped in 1979.

In addition to his transportation-related accomplishments, Robeson has been a civic leader in campaigns and operations of the YMCA,

Boys Clubs, Urban League, United Way, Presbyterian Church, theater and art associations.

He is a member of the Mission Hills (Kansas) Country Club; University Club in Kansas City, Missouri; Bay Hill Club and The Country Club of Orlando in Orlando, Florida; and Garden of the Gods Club at Colorado Springs, Colorado. He and Mrs. Robeson, the former Katherine Willard, have two sons and three grandchildren. In the 1950s, when Johnson County residents had to drive to Kansas City to find a library, the Robesons teamed up to rectify the situation. Katherine organized the total effort and pushed legislation. Later Mark chaired the bond drive to erect the building for a countywide library system.

### **Ouellette Elected as Director**

K. Martin Purala resigned for reasons of health as an Eno Foundation Director at the January 1978 meeting of the Board and was elected an Honorary Director. A special meeting of the members of the Eno Corporation (all were Foundation Directors) was held the following April to name a successor to Purala as a permanent Director. The members unanimously elected Roland A. Ouellette, who was Director of Transportation Affairs for the Washington office of General Motors Corporation.

### **Innovations of the 1980s**

The decade of the 1980s was marked by innovations such as computerization, contracted building and grounds maintenance services, and greater involvement of the Board of Consultants in programs and planning. There was general improvement in the financial situation of the Foundation, increasing the income and market value of its securities portfolio. These changes were accompanied by accelerated endeavors on a wider scale within the Foundation.

Ten \$2,000 scholarships in transportation study were established in selected colleges and universities, and 15 others at \$4,000 each for graduate students in such institutions as Ohio State, Michigan State, Purdue, Massachusetts Institute of Technology, Georgia Tech, and the Universities of California (Berkeley), Connecticut, Illinois and Texas (Austin).

Major changes in the Eno Foundation methods of operation were assured by the action of the Directors in October 1983 when they authorized the purchase of computer terminals to improve production and mailing of *Transportation Quarterly* and monographs, as well as to assist in library cataloging, bookkeeping, accounting, and other office tasks. Members of the Board and staff continued to represent the Foundation at national and international transportation conferences.

### **Board Meets at Williamsburg**

Directors held their May 1984 meeting at the Williamsburg Lodge in Williamsburg, Virginia, where Chairman Smith was the long-time transportation consultant for the colonial restoration. All seven members of the Board were present.

Smith reported that Fred Hurd, traffic educator and author, died February 29, 1984. After a long and distinguished educational career at the Bureau of Traffic, hosted by Yale and Penn State Universities, Hurd became a Consultant and part-time staff member of the Eno Foundation. A memorial resolution was passed by the Eno Board, lauding him for his "informed and superior judgement and his devotion to the best interests of the Eno Foundation."

President Holmes announced that the "Wilbur S. Smith Award"

sponsored by the Highway Division of the American Society of Civil Engineers had been fully endowed. Chairman Smith expressed appreciation for the support of the ASCE members and other friends.

Suggestions were received for publication of a monograph on the history of the Eno Foundation. Mrs. Munger, Secretary and Treasurer, was asked to serve as historian with a 2-year projection for completion of a history of the Foundation.

### **Munger's Health Declines**

Mrs. Munger regularly attended and participated in meetings of the Board of Directors, but she was absent from the one held in April 1985 at the Isle of Palms near Charleston, South Carolina. Chairman Smith reported that she regretted that she could not be present because of health problems.

She indicated that she would be unable to prepare the manuscript for the history of the Eno Foundation. This news came as a serious disappointment. More than anybody else, Mrs. Munger was familiar first hand with the personnel, policies and performance of the Foundation. Starting the day after the World War II attack on Pearl Harbor, she served 27 years as Secretary to Presidents Eno, Tilden, Goetz and Smith. For 8 of her staff years she was also a member of the Board of Directors, serving as Secretary and Treasurer of the Foundation.

### **Montgomery Retained to Write History**

With Board approval, Chairman Smith negotiated with John A. Montgomery, a retired newspaperman who had written *Columbia: The History of a City* and *The History of Wilbur Smith and Associates*, to author the Eno history. Holding top priority in his research plans were conferences with Mrs. Munger, but she died July 4, 1985, before they were accomplished.

It was appropriate that the memorial service in her honor was held at the Eno Foundation headquarters and the eulogy was delivered by President Holmes.

Harold F. Hammond resigned as Vice President of the Foundation. He was immediately elected Secretary and Treasurer to succeed Mrs. Munger and held that position until he resigned his active Board post, effective June 1, 1988. He was also appointed Chairman of the Personnel Committee and charged with recommending a successor to President Holmes, who had announced plans for retirement.

At the Board of Directors' meeting August 2, 1985, at the Longshore Inn in Westport, Connecticut, Chairman Smith took official notice of the death the previous month of Mrs. Charlotte K. Munger, Secretary and Treasurer of the Eno Foundation. Mr. Smith said he had received many compliments on the memorial service for Mrs. Munger held July 31 in the Foundation offices. He then read aloud a proposed resolution:

*RESOLVED that the members of the Board of Directors of the Eno Foundation for Transportation record their sorrow at the death of their valued friend and colleague, Mrs. Charlotte K. Munger, whose association with this Corporation began in 1941. Her informed and superior judgement and her devotion to the best interests of the Foundation will be remembered with appreciation . . .*

Mr. Smith moved for adoption of the resolution. The motion was seconded by Robeson and unanimously approved.

At this meeting, Hammond's committee recommended the

employment of Director Ouellette as President to succeed Holmes.

At the August 1985 Board meeting, President Holmes announced that Chairman Smith had recently received three of the transportation profession's most prestigious tributes: the George S. Bartlett Award of the American Road and Transportation Builders Association; the National Association of Professional Engineers in recognition of his outstanding accomplishments during nearly 50 years of pioneering and advancing the field of transportation and engineering; and the P.D. McLean Award from the Road Gang in Washington, D.C.

### **Robert Weant Congratulated**

Mr. Ouellette was joined by the other Directors at the August 1985 Board meeting in officially recognizing Bob Weant's elevation to Vice President - Technical Services of the Foundation and congratulating him on his promotion.

A special meeting of the Board of Directors was held later in August and attended by the senior class (third year members) of the Board of Consultants. The purpose was to suggest plans for the future of the Eno Foundation to the Board of Directors. Numerous suggestions were made for subsequent study and recommendation. Consultants attending were: Arthur J. Bruen, Jr., Marine Bank, Milwaukee; M.E. "Murph" Dullum, Delta Airlines; Louis J. Gambaccini, Port Authority of New York and New Jersey; and Daniel J. Hanson, Sr., President of the American Road and Transportation Builders Association.

### **Veteran Employees Retire**

Two veteran employees, Andrew J. DiProspero, Sr. and Eugene A. Romano, Sr., each with close to 30 years of service on the staff of the Eno Foundation, retired during the 1980s.

Mr. DiProspero joined the Foundation in 1956 as groundskeeper and maintenance man. He retired in 1983. Up until the late 1970s, the Foundation's headquarters was situated on over 45 acres of land. Mr. DiProspero was responsible for mowing the fields and keeping the grounds attractively manicured. He recalls the days before modern power hand tools when he trimmed the hedges bordering the Foundation's property by hand.

Mr. DiProspero and his wife Ann live in Westport. They have two children, Andrew, Jr. and Joyce.

As a teenage assistant in his uncle's Saugatuck gasoline station, Mr. Romano serviced the automobiles of Mr. Eno and the Foundation. In 1957 he was hired as chauffeur for the Foundation, succeeding Tommy Longmire, who was retiring after many years of driving for Mr. Eno and the corporation. One of Mr. Romano's major duties was shuttling VIP visitors around during the Foundation's annual Joint Conference. Although he retired in 1986, Mr. Romano continues to work as mail clerk on a part-time basis.

He is the father of two sons, Eugene, Jr., a navy journalist, and Jeffrey, an industrial designer. His wife is a secretary at Save the Children Federation, Westport.

### **New Office: Vice Chairman**

Bylaws of the Eno Foundation were changed at the annual meeting of Directors on February 5, 1986, to add the office of Vice Chairman. The new list of officers would include the Chairman of the Board, Vice Chairman, President, Secretary and Treasurer. All except the President and Vice Presidents had to be elected from the Board. The bylaws were amended with the purpose of electing



Holmes as Vice Chairman after his retirement from the Presidency.

Robeson moved that the following officers be elected to serve the next year: Wilbur S. Smith, Chairman of the Board; Robert S. Holmes, Vice Chairman; Roland A. Ouellette, President; and Harold F. Hammond, Secretary and Treasurer.

Burr Kelsey seconded the motion and the vote was unanimously favorable. Chairman Smith officially welcomed Ouellette as the new President, whose duties began immediately.



## CHAPTER 22

# Ouellette Is New President

Robert Holmes had been President nearly 12 years before retiring from that office at the age of 73. "I was ready to go," he said, "because I felt that I would have to start out with a brand new set of goals and objectives."

When Holmes had made his retirement intentions known, Roland Ouellette expressed an interest in the possibility of replacing Holmes if he could obtain early retirement from his employer, General Motors.

Looking back on the situation, Holmes reflected:

*I thought, this is the guy we're looking for. He's already on the Board of Directors. He realized—as I did when I retired from U.S. Steel at the age of 61—that he had gone as far as he could with General Motors and he, at 56, would like to take on the Eno challenge. Based on his own experience in his vocation as an Eno Director, he had come up with the innovation of computerizing our organization and eliminating a lot of obsolete procedures. The timing was right for this change.*

### Unanimous Choice

Upon Holmes' decision to retire, three members of the Board were appointed to a Selection Committee to find his replacement. After a 3-month deliberation period, Ouellette became the unanimous choice of both the Committee and the Board. After having obtained early retirement from General Motors, he agreed to assume the presidency early in 1986 when Holmes handed over the reigns. The first task Ouellette undertook shortly after taking office was to research the Foundation's records and materials, especially those left by Mr. Eno himself.

In addition to familiarizing himself more closely with the Foundation's personnel, legacy, history and programming, he proceeded to develop and propose new personnel and organizational programs. During his first year, the Board approved his proposal for changing the management of the Foundation's investment portfolio, from a New York bank charged with this responsibility since the Foundation's establishment in 1921, to a firm specializing in foundation portfolios. Under the new investment managers, the Foundation's income and capital fund have begun to show improvements over previous years.

Perhaps his most far-reaching proposal presented to the Board since becoming president occurred during his second year of tenure. This involved a new three-part plan for guiding the Foundation's future growth. The plan involves: (1) the Foundation's ability to fund its programs, (2) the scope and appropriateness of its research and educational activities, and (3) the effectiveness of its organizational structure in carrying out program activities. Entitled "New Directions," and as approved in concept by the Board at its April 1987 meeting, it now serves as a directional guide for Board consideration and action on Foundation activities and programs. Under this plan,

proposals will go before the Board in the years ahead for improving the Foundation's financial base (especially through the imposition of publication fees), strengthening the Foundation's three program elements (research, public information and educational support) and, expansion and realignment of personnel and other organizational aspects of the Foundation staff as the need arises.

President Ouellette sought and obtained Board approval during his second year of tenure for upgrading the Foundation's computer hardware and software capabilities, a program initiated under his direction while he was serving as a Board member several years earlier. (As a Director, and based on his experience at General Motors, he recommended to the Board that computers be used as a tool for finances, publishing, mailing and other possibilities to save time and increase efficiency. He figured that computerization would cut printing costs in half, speed up bookkeeping, maintain standardized records and perform other services to streamline the operation and lower overhead expenses.) With these new tools, the Foundation has been able to greatly improve its publication capabilities as well as to achieve a better grasp of, and more control over, its entire financial operations. Ouellette not only initiated, with Board approval, the reequipping and redecorating of various offices in the Foundation building, but also undertook a full architectural and mechanical assessment of the building so that needed improvements could be made on a scheduled basis.

During his third year as President, Ouellette instituted a total restructuring of the Foundation's employee retirement program, health and insurance plans, and incentive compensation programs—all of which were approved by the Board.

#### **Veteran Eno Director**

Mr. Ouellette served on the Eno Foundation's Board of Directors 7 years while he was Director of Transportation Affairs for General Motors Corporation in its Washington, D.C., office. During his 18 years with GM he was involved in all modes of transportation. He was a key person in organizing the corporation's Transportation Interstaff Group, which represented all division and staff entities involved in transportation procurement, equipment manufacturing and sales, service and related research. He served as a member and later as Chairman of this group.

Prior to his GM tenure, Ouellette was an executive with the Transportation Association of America and the U.S. Chamber of Commerce. With the Chamber, he was director of the Transportation Action Program specializing in aviation, highway, and urban transportation.

Mr. Ouellette began his career in the field of transportation almost 40 years before assuming the Eno presidency, first as a surveyor's assistant with a paving and road building contractor, then as a trainee with the Southern Pacific Railroad. After an interim of military service overseas in the early 1950s, he became an employee of the U.S. Congress with the Congressional Legislative Reference Service and later with the U.S. Senate Commerce Committee staff where he was coordinator of the 1961 National Transportation Policy Study (popularly known as the "Doyle Report") that was the basis for creation of the U.S. Department of Transportation.

He served as chairman of the Transportation Committee of the Motor Vehicle Manufacturers Association, the Program Evaluation Subcommittee of the Highway Users Federation, the Legislative Committee of the Railway Progress Institute, and as a member of the Executive Committee of the Transportation Research Board of the



*Roland A. Ouellette*

National Academy of Sciences' National Research Council. Mr. Ouellette also served on the Executive Committee and on the Board of Directors of the National Defense Transportation Association, and as a Board member of the Transportation Association of America. He is a charter member of the Transportation Research Forum and was active in the Delta Nu Alpha transportation fraternity while at American University. He is presently a member of the Board of Directors of The Road Information Program (TRIP).

### **Other Transportation Activities**

Mr. Ouellette also has been active in the American Public Transit Association, American Road and Transportation Builders Association, American Transportation Advisory Council, Michigan Highway Users Conference, National Safety Council, Traffic Safety Association of Detroit, the Greater Detroit Chamber of Commerce Transportation Committee and Traffic Improvement Association of Oakland County, Michigan.

A native of North Attleboro, Massachusetts, Ouellette is a graduate of St. Anselm's College in Manchester, New Hampshire, and did postgraduate work at Georgetown and American Universities in Washington, D.C. He was studying transportation logistics and administrative management in night classes at American University when General Motors hired him.

President Ouellette and his wife, Ursula (Hambach), live in Westport, Connecticut, the home of the Eno Foundation. They have four children: Deborah (Irwin), Jennifer (Vance), Denise (Rosso) and Stephen.

He received his first impression of the Eno Foundation from reading the Foundation's Quarterly journal and readily accepted when President Holmes invited him to become a member of the Board of Consultants. After a 3-year term he was elected to the Board of Directors.

### **Larson Completes Board Roster**

Dr. Thomas D. Larson, Secretary of Transportation for the State of Pennsylvania, was received as the new Director of the Eno Foundation at the May 1986, meeting of the Board at the Greenbrier in White Sulphur Springs, West Virginia. As the successor to the late Charlotte Munger, he made the seven-member Board complete. With the exception of Chairman Smith, all members of the contemporaneous Board joined the organization since the death of Colonel Goetz, Wilbur Smith's immediate predecessor as Chairman and President.

### **Honors for Thomas Larson**

Dr. Larson was appointed Secretary of Transportation of the Commonwealth of Pennsylvania in 1979 after serving as Professor of Civil Engineering at Pennsylvania State University. He inherited a situation that was described in a 1979 major engineering magazine as follows: "Pennsylvania's highway system is marked by such disrepair, dispute and disarray that restoration seems all but impossible."

Welcoming Dr. Larson as a new member of the Board, Chairman Smith referred to his outstanding accomplishments in government, academia and business, and his active participation in many professional organizations.

Only the year before, Dr. Larson received the International Road Federation's highest honor, IRF Man of the Year Award, in recognition of his leadership in the highway field. Presented at the 100th anniversary meeting of the IRF Board of Directors in Taipei, Taiwan, the citation read, in part:

*His dedication and successful efforts to improve and modernize the Department of Transportation through application of the latest technology and management practices are an inspiration and a shining example for highway administrators and agencies in all countries. In serving his own state and country, Mr. Larson's vision has furthered the cause of better roads throughout the world.*

### **A Message for the World**

In making the award, IRF Chairman Dana Low said, "The selection this year carries a vital message which we wish to have heard in every corner of the earth. It is that imaginative leadership coupled with sound management concepts and practices will produce better roads for less money."

Of the 35 recipients of the IRF Man of the Year Award, only three were from the United States. The other Americans were Federal Highway Administrators Rex Whitten and Francis C. Turner.

"By the application of modern transportation management practices," commented *The Quarterly* magazine of the American Association of State Highway and Transportation Officials, "the integration of fiscal and data processing systems, and with an open and intensive public information program, Dr. Larson has transferred the Pennsylvania Department of Transportation into one of the most modern and highly regarded organizations among the 50 states of the nation"

Dr. Larson's public service career has brought him many honors and awards. The Highway Users Foundation honored him in 1986 as co-recipient of the Stanley Gustafson Leadership Award "for his superior direction of a state highway program and service to its citizens and business and industry in Pennsylvania." The College of Engineering at Pennsylvania State University elected him "Outstanding Engineering Alumnus." He was the Pennsylvania Chamber of Commerce's "Government Leader of the Year," the winner of the National Governors Association's "Distinguished Service to State Government Award," and he was elected to the prestigious National Academy of Engineering.

### **President of AASHTO**

As President of the American Association of State Highway and Transportation Officials, Dr. Larson attended the 1987 meeting of the Australian Research Board in Adelaide, Australia, and an international symposium on "Urban Transportation in Developing Countries" in Taipei, Taiwan.

He has three earned degrees from Pennsylvania State University. He did post-doctoral work at Oklahoma State University, underwent special transportation training at the Massachusetts Institute of Technology, and worked in national transportation laboratories in England and Sweden.

After 8 years as Pennsylvania's Secretary of Transportation he resumed his academic career in 1987 at Penn State as Pennsylvania Professor of Government for the schools of engineering and business administration, and a special assistant to President Bryce Jordan for economic development activities.

Dr. Larson and his wife, Esther, live in Lemont, Pennsylvania. They have three daughters.

### **Full Eno Board Stabilized**

The Board of Directors of the Eno Foundation for Transportation met August 4, 1986, at the Marriott Hotel in Stamford, Connecticut, with a full complement. Members present were: Smith, Chairman of the Board; Holmes, Vice Chairman; Ouellette, President; Hammond,

Secretary and Treasurer; H. Burr Kelsey; Larson; and Robeson.

Chairman Smith reported on his presentation of a paper on the future of the Interstate System before the fourth annual meeting of the Transportation Council of the Southern Legislative Conference at Fort Worth, Texas. (This paper was published in the October 1986 issue of *Transportation Quarterly*.) Interaction with the conference members, he said, was very positive.

### **Mr. Eno's Legacies Retained**

In a discussion of selling off certain assets bequeathed by William P. Eno to furnish the Foundation's headquarters, Chairman Smith declared that Mr. Eno's bequest of these personal items was further evidence of his great dedication and devotion to the Foundation and its mission. The artwork and furnishings served a great need, for at the time of Mr. Eno's death the building was still ill-equipped.

It was decided to market only those pieces that were in poor or deteriorating condition and served no decorative or practical use in the building. Items that were to be retained related directly to Mr. Eno, had historical, sentimental, ornamental or utilitarian values, and maintained the elegant look of the Eno Foundation's interior.

### **Additions of Staff**

President Ouellette announced at the February 5, 1987, annual meeting of the Eno Board of Directors that Jennifer E. Lashley, employed as an additional clerical secretary, started working that week in the Foundation's Editorial Department.

Mrs. Lashley is a native of West Virginia and the daughter of a Baptist minister. As a high school student she was a member of the National Honor Society and graduated from Sparta (New Jersey) High School in 1979. Four years later she graduated from The King's College in Briarcliff Manor, New York, with a Bachelor of Arts degree in Sociology. She was married soon after graduation to Mark A. Lashley.

Mrs. Lashley was promoted to the position of Circulation Manager of the Foundation's publications in April 1988. Her duties at the Foundation include accounts receivable, publication order processing, customer service, inventory control and maintaining mailing lists on the computer.

Since the February 1987 meeting, the Foundation has employed two new staff members, Yvonne Tucker and Geraldine K. Kucsma. Ms. Tucker assumed Mrs. Reed's position as Financial Manager and Administrative Assistant. Ms. Tucker came to the Foundation with over 30 years of experience in the bookkeeping/secretarial field, including 20 years of work in family-run business ventures.

Ms. Kucsma joined the Eno Foundation in 1988 as Secretary/Receptionist. Prior to her association with the Foundation she was employed by John L. Altieri Consulting Engineers, Norwalk, the Silver Hill Foundation, New Canaan, and Spadone Machine, Norwalk.

### **Prospectus for Future**

Selection of a new Eno Foundation president was a major milestone in the history of the Foundation. It also provided an opportune time to assess and reevaluate the programs, objectives and activities of the Foundation's philosophy as envisioned by Mr. Eno. In presenting the "New Directions" plan for guiding the Foundation's future, President Ouellette explained that it incorporated many of the views expressed by Board of Consultants members and others involved with the Foundation. The plan is intended to stimulate and guide the Foundation's future progress.

The overall goal of the Foundation has been, and continues to be, to help improve transportation in all its aspects through the conduct and encouragement of appropriate research and educational activities. The Foundation's Board of Directors believes this overall goal is more than ever appropriate to today's world. In striving toward this goal, the Eno Foundation has achieved growth and a solid record of accomplishments since its creation in 1921.

In Mr. Eno's day the rapid advancement of transportation technology was only beginning. While this progress has been undeniably beneficial, it did lead to a host of new challenges as the demands of a growing economy multiplied. Mr. Eno recognized that solutions would depend on the continuous application of new scientific thinking, and devoted a major part of his life and resources to encourage this outcome. He also recognized that permanent solutions were virtually impossible to achieve because of the ever-changing conditions. Developing scientific approaches to problems with a changing nature represented a tall hurdle in itself, but equally difficult was the job of persuading change in public attitudes, he maintained.

Now and into the future, Mr. Eno emphasized, accelerating change would continue to pose new problems and a need for new or changed thinking. He was also convinced that many of the old problems, such as safety and traffic congestion, would continue to swell and ebb with the tides of public concern. Advancement in transportation technology and services, he also believed, would always outpace a responding change in public attitudes. Thus, Mr. Eno's philosophy of meeting change with change will remain as appropriate in the future as it has been in the past; and opportunities for the Eno Foundation to make worthy contributions are virtually unlimited.

With a broad horizon over which to direct its limited resources, what should the Eno Foundation's future course be? In the wisdom of his philosophy, Mr. Eno provided great latitude in the organization's governing bylaws for the Foundation to change with the times. And change it has, but always without losing sight of its overall goal or its objectiveness in pursuing research and educational activities. In assuming his new office, President Ouellette, with the Board's support, spearheaded work to assess and reevaluate the Foundation's position in respect to its future direction and activities. Ouellette's work in this area has excited new enthusiasm for guiding the Foundation into the future, and it has reinforced the principles upon which the Foundation has built since its inception.

### **The Logical Direction**

Historically, the Foundation's strength has been in research and education. These activities have expanded transportation knowledge and earned substantial positive recognition for the Foundation in academic and professional circles. Given the Foundation's prior success along this course, and the continuing need for such work, the Foundation's Board of Directors finds it logical to continue in this direction.

The Foundation's Board of Directors continues to believe strongly that the Foundation should stay clear of any political developments affecting transportation development. The unbiased work of the Foundation does, however, play a role in helping to develop an information base on which transportation decision makers can draw in formulating their own actions and policies. The Foundation's not-for-profit financial and political independence enables it to carry out its mission in a direct and factual manner without a bias or self-serving interest. The Foundation's leadership will continue to protect and preserve this unique virtue.

As worthy as the traditional role of the Foundation has been,



there is much opportunity for improvement. In recognition of this, the Board of Directors is implementing changes in the areas of programming, staffing and funding. The objective is to increase the visibility and availability of the Foundation's work, as well as to gradually expand its scope of services contributing to the improvement of transportation.

### **New Programming**

The Foundation is actively involved in three program areas: research, public information and educational support. These program areas are interdependent and tied with the common thread of published information. Results of research activities are normally published by the Foundation and made available for public information and as teaching aids. Each program area is undergoing change with the infusion of new ideas and increased funding. Some changes have already proved effective while others are still in the embryonic stage.

*Research projects* will continue to be carefully targeted to produce needed and usable information for practicing transportation professionals and those with public and private responsibilities for transportation decisions. Outside specialists will perform most of the research and the results will be published in an attractive, easy to use format. A significant change is that the availability of Eno published reports are being advertised far more widely than in the past.

Greater emphasis is being placed on joint participation with other organizations in making research findings available to the public. The expense of developing and publishing research findings is sometimes too prohibitive for one organization to finance alone. The team approach was successfully used by the Foundation in 1987 to produce a study of work-trip commuting patterns and trends in the United States. This project not only provided extremely useful and highly publicized information, but illustrated that a team approach can be a viable avenue for Eno Foundation participation.

*Public information* services of the Eno Foundation have been largely based on producing and distributing the *Transportation Quarterly* journal, printing and distributing research monographs, and responding to public inquiries for information. Additionally, Eno staff personnel have been made available as independent moderators of controversial public hearings on transportation matters, contributors to professional forums and working committees of different organizations, and as public speakers and guest classroom lecturers. These services have been expanded to include consultations on the presentation of national and local media programs dealing with transportation issues.

Another new service involves providing current statistical data on the movement of people and goods in the United States by the several transport modes. This new program feature, called *Transportation in America*, will also identify changing transportation trends and other statistical factors affecting decisionmakers in the public and private sectors. A compendium of data will be published annually (beginning March 1989) with updates provided periodically during each year. Several other new services are being considered for possible future implementation, including a popularized magazine on transportation, educational materials for elementary and secondary school-age children, and new mediums for delivering information such as videotape, telephone faxing and on-line computer accessible data bases.

*Educational support* activities of the Foundation have sought to provide classroom teaching materials, forums to enhance a common

understanding between professionals practicing in different facets of the transportation spectrum, and educational grants for graduate studies in transportation. Educational grants were discontinued in 1988 for an indefinite period in order to reallocate funds toward other program objectives felt to be more urgent in achieving the Foundation's goal.

In addition to the Eno Foundation's annual Joint Conference of the Board of Directors and Board of Consultants, plans are underway to create new opportunities for the exchange of thinking in support of education in transportation. Under consideration is a student conference series that would recognize outstanding academic achievement, and provide opportunities for students to exchange views with practicing professionals and learn by participating in the real world of transportation.

### **Expanded Staffing**

As the availability of the Foundation's services becomes more widely known and its program activities intensify, it probably will be necessary to add more technical and support personnel. It has been the prudent policy of the Foundation to operate at a minimum staffing level. This has been a highly successful approach, using a small number of well qualified and dedicated people.

Computerization of the Foundation's operations has enabled staff members to become more productive. It also has created greater capacity to assume work previously contracted to outside providers, especially in the publication of manuscripts. Computerization has improved financial control and planning in all aspects of the Foundation's operations. And, it has increased the Foundation's ability to make many more people aware of the Foundation's work and services. This improved capability to reach people all over the world, coupled with the Foundation's aim to provide more effective programming, is in its infancy but already it has generated greater recognition of and demand for publications and services.

### **New Sources of Funding**

From the beginning, the Eno Foundation has been moderately but effectively endowed to support a service program of limited scope. It has not been necessary to actively solicit contributions, although many dedicated transportation professionals have generously contributed much time and effort to the Foundation's programs. The investment portfolio providing the necessary operating capital is conservatively managed to yield a respectable return and growth on principal.

One major expense has been in publishing and distributing *Transportation Quarterly* and on research projects. Except in special rare cases, it has been the Foundation's policy to distribute these publications without charge.

This policy lent a large measure of uniqueness to the Foundation over the years while at the same time somewhat inhibiting the actual reach of the Foundation because of the limited publications available. Furthermore, as more and more people have come to know and want the Foundation's works, publishing and distribution costs have steadily increased, thus putting the Foundation in the unfavorable situation of not being able to meet demands. It was for these reasons and enthusiasm for freeing more capital to expand the Foundation's publication base, that the Board of Directors decided to levy modest charges for publications beginning in July 1988.

It was agreed that the Foundation would price its publications at a level that would return as close as possible the cost of production and

distribution. The *Transportation Quarterly* journal is an exception—it will continue to be disseminated at no charge. Charging for publications, only if to recoup a portion of costs, is a monumental but decidedly constructive policy change for the Foundation.

### **The Path Ahead**

It appears that the Eno Foundation for Transportation is on the verge of a quantum leap in its history of ever changing, always advancing pursuit of furthering transportation development through knowledge. An array of exciting options challenge the Foundation in its pivotal 66th year of existence. If enthusiasm and confidence among its ranks are any indicator, its future should be productive. One thing is certain, however, “The emphasis, as it has been in the past,” Chairman Wilbur Smith recently declared, “will be on programs and activities aimed at ensuring an effective role for the Eno Foundation in the broad field of transportation.”

The late William Phelps Eno would undoubtedly take great satisfaction in knowing that his lifetime pursuit for improved transportation will continue in force into the twenty-first century.



# APPENDIX **A**

## Board of Directors 1947-Present

Listed below are members of the Eno Foundation's Board of Directors from 1947 to the present. References to Board of Directors before 1947 can be found in the text of this book.

### 1947-1959

Col. Robert C.F. Goetz, Westport, Connecticut, *Chairman and President*  
Courtland Kelsey, New York, New York, *Vice President*  
Charles M. Upham, Washington, D.C., *Vice President*  
Philip K. Smith, New York, New York, *Treasurer and Assistant Secretary*  
Mary S. Briody, Westport, Connecticut, *Secretary and Assistant Treasurer*  
George Parmly Day, New Haven, Connecticut  
Alberta A. Eno (married William Drayton in 1953)

### 1960

Col. Robert C.F. Goetz, Westport, Connecticut, *Chairman and President*  
Courtland Kelsey, New York, New York, *Vice President*  
Charles M. Upham, Washington, D.C., *Vice President*  
Philip K. Smith, Eustis, Florida, *Treasurer and Assistant Secretary*  
Mary S. Briody, Westport, Connecticut, *Secretary and Assistant Treasurer*  
Alberta A. Drayton, Summerville, South Carolina  
Wilbur S. Smith, New Haven, Connecticut

### 1961-1965

Col. Robert C.F. Goetz, Westport, Connecticut, *Chairman and President*  
Courtland Kelsey, New York, New York, *Vice President*  
Charles M. Upham, Washington, D.C., *Vice President*  
Philip K. Smith, Eustis, Florida, *Treasurer and Assistant Secretary*  
Mary S. Briody, Westport, Connecticut, *Secretary and Assistant Treasurer*  
Charlotte K. Munger, Westport, Connecticut  
Wilbur S. Smith, Consulting Engineer, New Haven, Connecticut

**1966**

Wilbur S. Smith, Westport, Connecticut, *President*  
Courtland Kelsey, East Orange, New Jersey, *Vice President*  
Charles M. Upham, Washington, D.C., *Vice President*  
Mary S. Briody, Westport, Connecticut, *Treasurer and Assistant Secretary*  
Charlotte K. Munger, Westport, Connecticut, *Secretary and Assistant Treasurer*  
M. Earl Campbell, Washington, D.C.

**1967**

Wilbur S. Smith, Westport, Connecticut, *Chairman and President*  
Courtland Kelsey, East Orange, New Jersey, *Vice President*  
Mary S. Briody, Westport, Connecticut, *Vice President*  
Charlotte K. Munger, Westport, Connecticut, *Secretary and Treasurer*  
Henry A. Barnes, New York City, New York  
M. Earl Campbell, Washington, D.C.  
Harold F. Hammond, Washington, D.C.

**1968-1969**

Wilbur S. Smith, Westport, Connecticut, *Chairman and President*  
M. Earl Campbell, Charleston, West Virginia, *Vice President*  
Charlotte K. Munger, Westport, Connecticut, *Secretary and Treasurer*  
Henry A. Barnes, New York City, New York  
Harold F. Hammond, Washington, D.C.  
Courtland Kelsey, East Orange, New Jersey  
K. Martin Purala, Forest Hills, New York

Honorary Board of Directors

Mary S. Briody, Westport, Connecticut

**1970**

Wilbur S. Smith, Westport, Connecticut, *Chairman and President*  
M. Earl Campbell, Charleston, West Virginia, *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
Harold F. Hammond, Washington, D.C.  
Robert S. Holmes, Pittsburgh, Pennsylvania  
Courtland Kelsey, East Orange, New Jersey  
K. Martin Purala, Forest Hills, New York

**1971**

Wilbur S. Smith, Westport, Connecticut, *Chairman and President*  
M. Earl Campbell, Charleston, West Virginia, *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
Harold F. Hammond, Washington, D.C.  
Robert S. Holmes, Pittsburgh, Pennsylvania  
H. Burr Kelsey, New York, New York  
K. Martin Purala, Forest Hills, New York

Honorary Board of Directors

Courtland Kelsey, East Orange, New Jersey

**1972-1974**

Wilbur S. Smith, Westport, Connecticut, *Chairman and President*  
M. Earl Campbell, Charleston, West Virginia, *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
Harold F. Hammond, Washington, D.C.  
Robert S. Holmes, Pittsburgh, Pennsylvania  
H. Burr Kelsey, New York, New York  
K. Martin Purala, Forest Hills, New York

1975-1976

Wilbur S. Smith, Westport, Connecticut, *Chairman*  
Robert S. Holmes, Westport, Connecticut, *President*  
Harold F. Hammond, Washington, D.C., *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
H. Burr Kelsey, New York, New York  
K. Martin Purala, Forest Hills, New York

Honorary Board of Directors

M. Earl Campbell, Charleston, West Virginia

1977-1978

Wilbur S. Smith, Westport, Connecticut, *Chairman*  
Robert S. Holmes, Westport, Connecticut, *President*  
Harold F. Hammond, Washington, D.C., *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
H. Burr Kelsey, West Orange, New Jersey  
K. Martin Purala, Forest Hills, New York  
Mark D. Robeson, Shawnee Mission, Kansas

Honorary Board of Directors

M. Earl Campbell, Charleston, West Virginia

1979

Wilbur S. Smith, Columbia, South Carolina, *Chairman*  
Robert S. Holmes, Westport, Connecticut, *President*  
Harold F. Hammond, Washington, D.C., *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
H. Burr Kelsey, West Orange, New Jersey  
Roland A. Ouellette, Washington, D.C.  
Mark D. Robeson, Shawnee Mission, Kansas

Honorary Board of Directors

M. Earl Campbell, Charleston, West Virginia  
K. Martin Purala, Forest Hills, New York

1980-1983

Wilbur S. Smith, Columbia, South Carolina, *Chairman*  
Robert S. Holmes, Westport, Connecticut, *President*  
Harold F. Hammond, Washington, D.C., *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
H. Burr Kelsey, West Orange, New Jersey  
Roland A. Ouellette, Washington, D.C.  
Mark D. Robeson, Shawnee Mission, Kansas

Honorary Board of Directors

K. Martin Purala, Forest Hills, New York

1984

Wilbur S. Smith, Columbia, South Carolina, *Chairman*  
Robert S. Holmes, Westport, Connecticut, *President*  
Harold F. Hammond, Washington, D.C., *Vice President*  
Charlotte K. Munger, New Haven, Connecticut, *Secretary and Treasurer*  
H. Burr Kelsey, West Orange, New Jersey  
Roland A. Ouellette, Washington, D.C.  
Mark D. Robeson, Shawnee Mission, Kansas

1985

Wilbur S. Smith, Columbia, South Carolina, *Chairman*  
Robert S. Holmes, Hilton Head, South Carolina, *President*  
Harold F. Hammond, Washington, D.C., *Secretary and Treasurer*  
H. Burr Kelsey, West Orange, New Jersey  
Roland A. Ouellette, Washington, D.C.  
Mark D. Robeson, Shawnee Mission, Kansas

1986-1987

Wilbur S. Smith, Columbia, South Carolina, *Chairman*  
Robert S. Holmes, Hilton Head, South Carolina, *Vice Chairman*  
Roland A. Ouellette, Westport, Connecticut, *President*  
Harold F. Hammond, Washington, D.C., *Secretary and Treasurer*  
H. Burr Kelsey, West Orange, New Jersey  
Thomas D. Larson, Harrisburg, Pennsylvania  
Mark D. Robeson, Shawnee Mission, Kansas

1988

Wilbur S. Smith, Columbia, South Carolina, *Chairman*  
Robert S. Holmes, Hilton Head, South Carolina, *Vice Chairman*  
Roland A. Ouellette, Westport, Connecticut, *President*  
H. Burr Kelsey, Montclair, New Jersey, *Secretary and Treasurer*  
Thomas D. Larson, University Park, Pennsylvania  
Mark D. Robeson, Shawnee Mission, Kansas

Honorary Board of Directors

Harold F. Hammond, Washington, D.C.



## APPENDIX **B**

# Board of Consultants 1947-Present

Listed below are members of the Eno Foundation's Board of Consultants from 1947 to the present. References to Board of Consultants members before 1947 can be found in the text of this book.

- J.A. Anderson, Commissioner, Department of Highways, Commonwealth of Virginia, 1951-1959.  
Ellis L. Armstrong, Director, Better Highways Information Foundation, Washington, D.C., 1962-1965.  
Frank C. Balfour, Chief Right of Way Agent, California Division of Highways, Los Angeles, California, 1957-1965.  
Ray A. Barnhart, Federal Highway Administrator, U.S. Department of Transportation, Washington, D.C., 1984-1987.  
John W. Barnum, Chairman, Transportation Section, American Bar Association, Washington, D.C., 1981-1984.  
Ralph R. Bartelsmeyer, Deputy Administrator, Federal Highway Administration, U.S. Department of Transportation, Washington, D.C., 1972-1974.  
Robert G. Bartlett, Executive Vice President, L.B. Smith, Inc., Camp Hill, Pennsylvania, 1979-1982.  
James P. Bass, Vice President, American Airlines, Washington, D.C., 1975-1978.  
Welton Becket, Welton Becket and Associates, Architects and Engineers, Los Angeles, California, 1961-1969.  
Louis E. Bender, Chief, Traffic Engineering Division, The Port of New York Authority, 1970-1973.  
Alan S. Boyd, President, National Railroad Passenger Corporation (AMTRAK), Washington, D.C., 1979-1982.  
J. Kenneth Bradley, Attorney, Bridgeport, Connecticut, 1947-1949.  
J. Robert Bray, Executive Director, Virginia Port Authority, Norfolk, Virginia, 1981-1984.  
Arthur J. Bruen, Jr., Vice President and Division Manager, Continental Illinois National Bank and Trust Co., Chicago, Illinois, 1983-1986.  
W.A. Bugge, President, American Association of State Highway Officials; Director of Highways, Washington State Highway Commission, Olympia, Washington, 1957-1975.  
Ray W. Burgess, Director, Department of Public Works, Baton Rouge, Louisiana, 1977-1980.  
Fred Burggraf, Director, Highway Research Board, Washington, D.C., 1952-1962.  
Wesley E. Burmeister, State Highway Engineer, Division of Highways, Wisconsin State Department of Transportation, Madison, Wisconsin, 1971-1974.  
James E. Burnett, Chairman, National Transportation Safety Board, Washington, D.C., 1987-1990.  
George W. Burpee, Partner, Coverdale-Colpitts, New York, 1957-1968.  
L.G. (Gary) Byrd, Consulting Engineer, Strategic Highway Research Program, Washington, D.C., 1986-1989.

Sen. John D. Caemmerer, Chairman, Joint Legislative Committee on Transportation, The Senate of the State of New York, Albany, New York, 1973-1976.

E. Wilson Campbell, Director, Chicago Area Transportation Study, 1968-1974.

Lt. Gen. Levin H. Campbell, Jr., Chairman of Board, Automotive Safety Foundation, Washington, D.C., 1956-1959.

M. Earl Campbell, Engineer of Economics, Finance and Administration, Highway Research Board, Washington, D.C., 1962-1965.

O.W. Campbell, Manager, Metropolitan Dade County, Miami, Florida, 1963-1972.

William N. Carey, Jr., Executive Director, Transportation Research Board, Washington, D.C., 1974-1977.

J.A. Caywood, Senior Vice President, De Leuw, Cather & Company, Washington, D.C., 1977-1980.

Frank L. Cerutti, Senior Vice President, Corporate Banking Group, The Riggs National Bank, Washington, D.C., 1986-1989.

Prof. Paul W. Cherington, School of Business Administration, Harvard University, Cambridge, Massachusetts, 1970-1973.

Nathan Cherniack, Economist, The Port of New York Authority, New York, New York, 1947-1956.

Frederick P. Clark, Planning Consultant, Rye, New York, 1952-1961.

John A. Clements, Commissioner, State of New Hampshire, Department of Public Works and Highways, Concord, New Hampshire, 1984-1987.

Randolph Collier, California State Senator, Sacramento, California, 1949-1958.

L.P. Cookingham, City Manager, Kansas City, Missouri, 1957-1972.

Edgar F. Copell, Traffic Engineer, Department of Public Works, Massachusetts, 1947-1954.

Robert M. Coultas, Executive Vice President, Institute of Rapid Transit, Washington, D.C., 1972-1978.

Joseph R. Coupal, Jr., Deputy Federal Highway Administrator, U.S. Department of Transportation, Washington, D.C., 1975-1978; President, The Asphalt Institute, College Park, Maryland, 1982-1985.

Charilyn W. Cowan, Staff Director, Committee on Transportation, Commerce & Technology, National Governors Association, Washington, D.C., 1983-1986.

William M. Cox, Arlington, Virginia, 1978-1981.

F. Bruce Crandall, President, Institute of Traffic Engineers; Traffic Engineer, Oregon State Highway Department, 1953-1956.

Roy W. Crum, Director, Highway Research Board, Washington, D.C., 1947-1951.

Lawrence D. Dahms, Executive Director, Metropolitan Transportation Commission for the San Francisco Bay Area, Berkeley, California, 1980-1983, 1985-1988.

Harmer E. Davis, Director, Institute of Transportation and Traffic Engineering, University of California, Richmond, California, 1972-1975.

William Eno DeBuys, Baltimore, Maryland, 1947-1958.

Thomas B. Deen, Executive Director, Transportation Research Board, Washington, D.C., 1981-1984.

Thomas Desmond, New York State Senate, Newburgh, New York, 1950-1962.

M.E. "Murph" Dullum, Vice President-Government Affairs, Delta Airlines, Washington, D.C., 1983-1986; 1988-1991.

Alan G. Dustin, President and Chief Executive Officer, Boston and Maine Railroad, North Billerica, Massachusetts, 1980-1983.

James P. Economos, Director, Traffic Court Program, American Bar Association, Chicago, Illinois, 1962-1971.

Roscoe Ellard, Columbia University, New York, New York, 1947.

Henry Fagin, Director, Regional Plan Association, New York, New York, 1958-1961.

W.G. Faithfull, Deputy Chief County Planner, Cumberland County Council, Sydney, New South Wales, Australia, 1961-1967.

Robert E. Farris, Deputy Federal Highway Administrator, U.S. Department of Transportation, Washington, D.C., 1987-1988.

Maj. Gen. Philip B. Fleming, Administrator, Federal Works Agency, Washington, D.C., 1948-1954.

Jefferson B. Fordham, Dean, Law School, University of Pennsylvania, 1954-1960.

Francis B. Francois, Executive Director, American Association of State Highway and Transportation Officials, Washington, D.C., 1984-1987, 1988-1990.

Welby M. Frantz, Eastern Express, Inc., Indianapolis, Indiana, 1976-1980.

Thomas J. Fratar, Tippetts-Abbett-McCarthy-Stratton, Engineers and Architects, New York City, 1961-1970, 1973-1976.

Timothy N. Gallagher, Manager, Regulations and International Operations, Air Transport Association of America, Washington, D.C., 1976-1978.

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Robert S. Holmes, President, American Road Builders Association, Washington, D.C., 1968.

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Donald R. Howery, General Manager, Department of Transportation, City of Los Angeles, California, 1981-1984.

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Lester P. Lamm, Executive Director, Federal Highway Administration, Washington, D.C., 1981-1984; President, Highway Users Federation, Washington, D.C., 1986-1989.

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Alger F. Malo, Director, Department of Streets and Traffic, Detroit, Michigan, 1968-1971.

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Theodore M. Matson, Director, Bureau of Traffic, Yale University, New Haven, Connecticut, 1947-1955.

Joseph M. McCabe, Assistant Director for Community Development, Office of Federal Activities, Environmental Protection Agency, Washington, D.C., 1976-1979.

Dr. R.A. McFarland, Harvard School of Public Health, Boston, Massachusetts, 1967-1970.

John D. McGillis, Director, Municipal Parking Authority, Detroit, Michigan, 1958-1961.

Arnold B. McKinnon, Executive Vice President, Law & Finance, Southern Railway System, Washington, D.C., 1982-1984.

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Melvin B. Meyer, City Traffic Engineer and Parking Director, City of Cedar Rapids, Iowa, 1984-1987.

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Harold L. Michael, Head, School of Civil Engineering, Purdue University, W. Lafayette, Indiana, 1979-1982.

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Arthur E. Miller, Inspector, Metropolitan Police Department, Washington, D.C., 1947-1953.

William J. Miller, Jr., Director, The Delaware River and Bay Authority, New Castle, Delaware, 1973-1976.

John K. Mladinov, Assistant Commissioner, Department of Planning and Development, New York State Department of Transportation, Albany, New York, 1968-1971.

Louis R. Morony, Director, Laws Division, Automotive Safety Foundation, Washington, D.C., 1962-1968.

R.L. Morrison, Professor of Engineering, University of Michigan, 1947-1952.

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Maj. Gen. Louis W. Prentiss, Executive Vice President, American Road Builders Association, Washington, D.C., 1962-1968.

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Robert H. Reeder, Executive Director, National Committee on Uniform Traffic Laws and Ordinances, Evanston, Illinois, 1984-1987.

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H.M. Reily, Engineer-Manager, Texas Turnpike Authority, Arlington, Texas, 1976-1979.

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Charles H. Sells, Commissioner, Port of New York Authority, New York, New York, 1958-1961.

Charles Seymour, President, Yale University, New Haven, Connecticut, 1947-1952.

Norman R. Sherlock, President and Chief Executive Officer, American Bus Association, Washington, D.C., 1987-1990.

Robert J. Shoup, Vice Chairman, Standing Committee on Traffic Court Program, American Bar Association, Cleveland, Ohio, 1971-1974, 1977-1980.

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William L. Slayton, Executive Vice President, American Institute of Architects, Washington, D.C., 1972-1975.

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S.S. Taylor, General Manager, Department of Traffic, Los Angeles, California, 1958-1961.

S.W. Taylor, Editor, *The Rider and Driver*, New York, New York, 1949.

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Norbert T. Tiemann, Federal Highway Administrator, U.S. Department of Transportation, Washington, D.C., 1974.

Paul J. Tierney, President, Transportation Association of America, Washington, D.C., 1980-1983.

Stuart G. Tipton, President, Air Transportation Association, Washington, D.C., 1972-1975.

Ronald J. Tober, Director of Transportation, Seattle Metro, Seattle, Washington, 1988-1991.

Vincent L. Tofany, President, National Safety Council, Chicago, Illinois, 1975-1978.

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T.E. Transeau, Bureau of Highway Safety, Pennsylvania, 1947-1954.

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Kenneth C. Welch, Architect, Grand Rapids, Michigan, 1956-1962.

John L. Weller, Vice President, Paine, Webber, Jackson & Curtis, Inc., New York, New York, 1973-1976.

Ben West, Mayor, Nashville, Tennessee; President, National Commission for Urban Transportation, 1958-1961.

Edward M. Whitlock, Jr., Senior Executive Vice President, Wilbur Smith and Associates, New Haven, Connecticut, 1980-1987.

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T.T. Wiley, Commissioner of Traffic, New York, New York, 1958-1961.

Sidney J. Williams, National Safety Council, Chicago, Illinois, 1947-1951.

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# APPENDIX **C**

## Eno Publications 1924 - Present

- 1924 *Suggestions on Traffic Control for Consideration at the National Conference on Street and Highway Safety*, William P. Eno
- 1926 *Fundamentals of Highway Traffic Regulation*, William P. Eno
- 1929 *Simplification of Highway Traffic*, William P. Eno
- 1935 *Sidewalks*, William P. Eno and C.J. Tilden
- 1936 *Why Automobile Accidents?* William J. Cox
- 1936 *Supplement to Simplification of Highway Traffic*, William P. Eno
- 1939 *The Story of Highway Traffic Control*, William P. Eno
- 1941 *Uniformity in Highway Traffic Control*, William P. Eno
- 1942 *The Parking Problem — A Library Research*, The Eno Foundation
- 1943 *The Speed Problem — A Library Research*, The Eno Foundation
- 1943 *The Evolution of a Uniform Road Traffic Control Code With Safety Rules for Pedestrians*, William P. Eno
- 1944 *Highway Traffic — Conference Proceedings*, The Eno Foundation
- 1944 *Home Defense Leagues for the Future*, William P. Eno
- 1945 *Highway Traffic — Conference Proceeding*, The Eno Foundation
- 1946 *Traffic Safety Education*, The Eno Foundation
- 1946 *The Organization of Official Traffic Agencies in Cities and States*, Wilbur S. Smith
- 1946 *An Economic Study of Interior Block Parking Facilities*, Charles S. LeCraw
- 1946 *Parking*, Wilbur S. Smith and Charles S. LeCraw
- 1946 *Toll Bridge Influence on Highway Traffic Operation*, M. Earl Campbell
- 1947 *Zoning Applied to Parking*, Charles S. LeCraw and Wilbur S. Smith
- 1947 *Traffic Performance at Urban Street Intersections*, Bruce D. Greenshields, Donald Schapiro, Elroy L. Erickson
- 1947 *Uses of Traffic Accident Records*, Committee on Uses of Developed Information
- 1948 *The Prohibition of Curb Parking*, Charles S. LeCraw and Wilbur S. Smith
- 1948 *Personal Characteristics of Traffic-Accident Repeaters*, Center for Safety Education of the Division of General Education at New York University
- 1948 *The Legal Responsibilities of Traffic Agencies*, C.H. Belser
- 1948 *Traffic Speed Enforcement Policies*, Wilbur S. Smith and Charles S. LeCraw
- 1948 *Parking Lot Operation*, Charles S. LeCraw and Wilbur S. Smith

- 1948 *Studies of Weaving and Merging Traffic: A Symposium*, F. Houston Wynn, Stewart M. Gourlay, Richard I. Strickland
- 1948 *The Traffic Design of Parking Garages*, Edmund R. Ricker
- 1949 *Municipal Regulation of Parking Lots*, Charles S. LeCraw and Wilbur S. Smith
- 1949 *The Motor-Vehicle Driver: His Nature and Improvement*, Milton D. Kramer
- 1950 *A Volume Warrant for Urban Stop Signs*, Morton S. Raff
- 1951 *Turn Controls in Urban Traffic*, The Eno Foundation
- 1952 *Statistics with Applications to Highway Traffic Analysis*, Bruce D. Greenshields and Frank M. Weida
- 1953 *Parking Authorities*, Edward G. Mogren
- 1953 *State Traffic Safety*, Maxwell Halsey
- 1954 *Driver Control; Achieving Greater Traffic Safety Through Efficiency at the Wheel*, Merwyn Kraft
- 1955 *Use of Poisson Distribution in Highway Traffic*, Daniel L. Gerlough
- 1955 *The Probability Theory Applied to Distribution of Vehicles on Two-Lane Highways*, Andre Schuhl
- 1956 *Parking*, Jefferson B. Fordham
- 1956 *New York's Air Travelers*, The Port of New York Authority, Aviation Department, Forecast and Analysis Division
- 1956 *Shopping Centers*, Eugene J. Kelley
- 1957 *Traffic Design of Parking Garages*, Revised, Edmund R. Ricker
- 1957 *Parking*, Robert H. Burrage and Edward G. Mogren
- 1957 *Air Travel Forecasting*, The Port of New York Authority, Aviation Department, Forecast and Analysis Division
- 1960 *Access and Parking for Institutions*, Wilbur S. Smith
- 1961 *Parking Garage Operation*, Robert E. Whiteside
- 1962 *Elementary Sampling for Traffic Engineers*, David F. Votaw, Jr. and Herbert S. Levinson
- 1968 *Roadside Hazards*, John A. Blatnik, Charles W. Prisk, Salvator J. D'Amico
- 1970 *Speed Enforcement Policies and Practice*, David K. Witheford
- 1971 *Poisson and Other Distributions in Traffic*, Daniel L. Gerlough, Frank C. Barnes, Andre Schuhl
- 1972 *Zoning, Parking, and Traffic*, David K. Witheford and George E. Kanaan
- 1973 *Parking and Access at General Hospitals*, George E. Kanaan
- 1978 *Statistics*, Bruce D. Greenshields and Frank M. Weida (edited by Dr. Daniel L. Gerlough and Dr. Matthew J. Huber)
- 1978 *Parking Garage Planning and Operation*, Robert A. Weant
- 1981 *Airport Administration*, John R. Wiley
- 1982 *Urban Transportation: Perspectives and Prospects*, Herbert S. Levinson and Robert A. Weant, eds.
- 1982 *Parking for Institutions and Special Events*, Edward M. Whitlock
- 1984 *Where's Main Street, U.S.A.?*, Gail G. Schwartz
- 1985 *Intermodal Freight Transportation*, John H. Mahoney
- 1985 *Airline Deregulation*, Melvin A. Brenner, James O. Leet, Elihu Schott
- 1986 *Effects of Deregulation on Motor Carriers*, Nicholas A. Glaskowsky
- 1986 *Airport Administration and Management*, John R. Wiley
- 1987 *Commuting in America*, Alan E. Pisarski
- 1988 *Managing National Transportation Policy*, John L. Hazard
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