

Roads Designed for Pleasure A Brief History of the Origins of Scenic Driving and Automobile Touring in the United States

Series: FHWA Highway History Website Articles

June 2011

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VOLUME 1 / ISSUE 1 / JUNE 2011

Roads Designed for Pleasure / Chik-Wauk Museum and Nature Center
Mapping Visitor Experiences / Byways Safety 101

Journal

FOR AMERICA'S BYWAYS 



A Publication from America's Byways Resource Center



ROADS DESIGNED FOR PLEASURE

A BRIEF HISTORY OF THE ORIGINS OF SCENIC DRIVING AND AUTOMOBILE TOURING IN THE UNITED STATES

BY PAUL DANIEL MARRIOTT

Author's Note: It seems appropriate, with the launch of the new *Journal for America's Byways*, that we consider the history behind our modern byways. Here is an introduction to the people, movements, technologies, and inspirations that form the basis of the American passion of driving for pleasure. As you will see, a number of nationally designated America's Byways® are a part of this rich history.

Introduction: The National Scenic Byways Program is the most recent accomplishment in a long history of ideas and movements designed to satisfy the innate need Americans have to explore their nation beyond the next horizon. America's Byways identify the best routes to the most interesting scenic, natural, recreational, historical, cultural, and archaeological wonders, and curiosities, that we, as an adventurous people, have always sought to discover and examine for ourselves. This article will introduce the origins of the modern byways movement by examining the history and evolution of pleasure driving in the United States. The article will argue that our broad definition of byways today, based on six intrinsic qualities, is rooted in eighteenth-century origins of scenic analysis and pleasure driving that arose from a new appreciation for the natural landscape during the Age of Enlightenment. The article will also show that many of our modern highway concepts, from innovations in pavement technology to advancements in engineering, are directly tied to the design and construction of nineteenth-century pleasure drives and early twentieth-century automobile parkways—both ultimately laying the foundation for our modern interstate system and solidifying our appreciation of driving for pleasure.



ONE OF THE FIRST SCENIC ROADS EVER CONSTRUCTED IN THE UNITED STATES (C. 1824) TOOK TRAVELERS IN CARRIAGES FOR A PRECIPITOUS DRIVE 3,000 FEET ABOVE THE HUDSON RIVER TO CATSKILL MOUNTAIN HOUSE—SIMPLY TO ENJOY THE VIEW. ETCHING BY JOHN RUBENS SMITH, 1830. COURTESY OF NEW YORK PUBLIC LIBRARY. WWW.NYPL.ORG.



DRIVING FOR PLEASURE

THE CARRIAGE DRIVES OF CENTRAL PARK BECAME AN IMPORTANT PART OF NEW YORK'S SOCIAL SCENE. "THE DRIVE," THOMAS HOGAN, 1869. COURTESY OF NEW YORK PUBLIC LIBRARY [DIGITAL ID: 800749].

Vehicle design, engineering, technology, and attitudes toward the landscape would have made the concept of driving for pleasure incomprehensible during the early days of the United States. Overland transportation was difficult in the colonial period and first years of the new republic. Few roads were constructed, or “artificial” as built roads were referred to during the period, and maintenance was sparse. Water travel, when available, was generally considered most reliable and comfortable. With the growth of the young nation, the authorization of turnpikes by state legislatures in the late eighteenth century, and the congressional authorization of the National Road in 1806—the first federally funded highway—the construction of roadways and the development of reliable all-weather paving techniques took on new importance.

AMERICAN ROOTS

After the American Revolution overland transportation was principally addressed by the development of toll roads or turnpikes. The first, chartered by the Commonwealth of Virginia in 1785, ran

west from Alexandria along the Potomac River to the Blue Ridge Mountains. The Philadelphia-to-Lancaster Turnpike in Pennsylvania began construction in 1793. The well-designed route covered sixty-two miles and showed a modest profit to its investors in the first five years—with profits climbing in subsequent years due to increased traffic from westward expansion. The turnpike was fifty feet wide between fences (what today we would define as the right-of-way), of which twenty-one feet was designated to be:

made an artificial road, which shall be bedded with wood, stone, gravel, or any other hard substance, well compacted together, a sufficient depth to secure a solid foundation to the same; and the said road shall be faced with gravel, or stone pounded, or other small hard substance, in such manner as to secure a firm, and, as near as the materials will admit, an even surface...¹

Due to the success of the Lancaster Turnpike and the urgent need for internal improvements, most states adopted toll financing for roads and canals by 1800.²

The National Road (All-American Road, 2002³) was envisioned by George Washington to open the interior of the young nation to commerce and secure the western frontier from competing, and potentially troublesome, European powers. Authorized by Thomas Jefferson on March 29, 1806, the National Road began in Cumberland, Maryland and extended to Wheeling, Virginia (now West Virginia) where it linked with the commercially vibrant Ohio River. To ensure a high-quality road, the commissioners recommended the state-of-the-art French Trésaguet method for highway construction. The first segment of the crushed-stone National Road opened to the public in 1818.

Despite the picturesque, even sublime, landscapes through which many of these roads were constructed, the urgent need for basic transportation, limited funds and the ambitious undertaking to build a federal highway to the West, it is not surprising that aesthetic sensibilities of the English picturesque landscape movement, then in vogue in Europe, were not considered in the design of these early roads. For the early American traveler, interactions with nature were more likely the result of bothersome stumps in the middle of the road than carefully planned and constructed panoramic views. One very notable exception was George Washington's Mount Vernon estate on the Potomac River.

In 1758 Washington sent to England to request a copy of Batty Langley's *New Principles of Gardening*. Langley (1696-1751) was an early proponent of the new

“natural” style of gardening that rejected the rigid formality of continental Europe. With Langley's text, Washington would create at Mount Vernon a picturesque landscape showcasing the natural beauties of his property and the bounty of his farm. A pleasure drive, designed in this “new” style, would welcome guests arriving by carriage at the West Gate. Here, Washington introduced a three-quarter-mile long vista across a rolling, green meadow to the mansion. Immediately after the impressive view, the drive diverged along a winding course through the woodlands and along the productive farm fields of the estate before returning to the formal axis (introduced with the vista) at the mansion grounds. Like the great English estate drives, the visitor was provided a glimpse of the destination (the mansion) and then treated to a pleasant (but relatively direct) scenic drive to admire the beauty of the landscape. This was a dramatic departure from the accepted and formal design traditions brought by the colonists to the New World—many of whom were out of touch with the latest landscape developments taking place in England.

BRITISH PRECEDENTS

Many of our theories on the laying out of pleasure drives come directly from the English Landscape School of the eighteenth century. During the Age of Enlightenment (a period of rational scientific thought and inquiry), the English Landscape School revolutionized gardening and dramatically altered how people viewed and appreciated their environment. During this formative era, the accepted and formal axial designs

of European estates, which demonstrated domination over the landscape, were rejected in favor of natural scenery. British landscape designers such as Batty Langley, William Kent (1685-1748), Lancelot “Capability” Brown (1715-1783) and Humphry Repton (1752-

and deliberately applied to landscape features in the eighteenth and nineteenth centuries. Their references to carriage roads and scenic drives provide clues to the design intent and physical execution of the route—and their use in written descriptions provides important insights

It may seem unremarkable to us, but the idea of providing a drive to showcase “romantic wonders” was nothing short of revolutionary.

1818), over a period of one hundred years of radical design and experimentation in the English countryside, established the design elements and the philosophical approach that would influence American scenic roads and parkways well into the twentieth century.

The English Landscape School addressed not only issues of circulation, design, and horticulture but also established scientific reasoning and terminology for appraising and understanding scenery.⁴ The terms *beautiful*, *picturesque*, and *sublime* often referred to as the aesthetic triangle, were debated among artists, landscape designers, and theorists on both sides of the Atlantic. While there continued to be intellectual debate among the nuanced meanings of each of the terms, it is important to note that the terms *beautiful*, *picturesque*, and *sublime* were carefully

into the intended driver experience. They were not generic landscape terms—as often used today—for pleasant scenery. In general, *beautiful* referenced pleasing features and attractive everyday scenes (a shady grove or farm pasture, for example); *picturesque* referred to more dramatic or rustic views (a rocky mountain face or windswept tree, for example); and *sublime* indicated awe-inspiring natural features (Niagara Falls or the Yosemite Valley, for example).

Humphry Repton, the last of the great influential English Landscape gardeners of this period, was perhaps the most detailed in his observations and recommendations for the design and laying out of pleasure drives. His detailed reports for each property he designed, exquisitely summarized in his “Red Books” (red-leather-bound notes and illustrations

for each site), show a mastery of the kinesthetic relationship between viewer and landscape. When developing plans for Blaise Castle in Bristol he wrote:

It is remarkable that no attempt should have been made to render objects of so much beauty and variety accessible in a carriage, for however interesting the walks in hilly countries may be, they can only be enjoyed by great labour and exertion; they require health of body and vigour of limbs to enjoy their romantic wonders, while the aged and infirm have been excluded from the beauties of the place by the danger and difficulty of exploring them.⁵

It may seem unremarkable to us, but the idea of providing a drive to showcase “romantic wonders” was nothing short of revolutionary. Repton was one of the most outspoken proponents of well-designed and well-located drives. In his 1792 plan for Antony House in Cornwall, he noted:

Few parts of modern gardening have been so mistaken as the management of approaches, there is no branch of the art on which I have so often had occasion to deliver my opinions; and without repeating all the arguments on which it is founded, I shall only assert, that an approach ought to be apparently, if not really a road to the house and to that only. if [sic] that road naturally leads thro’ a considerable extent of what I have called park, it is the duty of the Landscape Gardener to shew [sic] the grounds to the greatest advantage, but it is absurd to mislead the visitor far out of his way, merely to shew such beauties as more properly belong to the Drive than

the approach, and still more absurd to make unnecessary circuit (which I have indeed seen practised) merely to have it said, that the approach is so many miles long; on the contrary, it frequently happens that a house is so situated as to make the public road the nearest line of approach, and a deviation from it must then be considered as an absurdity, but as such a circumstance often tends to lessen the importance of a place, if the public road cannot be removed to a distance, it is an allowable deception to disguise that public road, and make it appear private, and as part of the approach.⁶

Carriage drives became popular features in the English landscape and were likely traveled by visiting Americans Thomas Jefferson and John Adams when they followed Thomas Whately’s guide to English gardens, *Observations on Modern Gardening*, during a tour in 1786. Whately included detailed descriptions of roads and avenues in his chapter titled “Of Art,” noting the desirable qualities of a route with “natural easy sweeps... presenting at every bend some new scene to the view.”⁷

Not only did carriage roads provide exceptional aesthetic pleasures and pleasing views, they also supported the increasingly popular sport of carriage driving in England. Managing a heavy carriage and team of horses required considerable skill, stamina, and strength. In America, the pleasures of scenic driving would be first introduced in the unlikeliest of locations—the cemetery.

AMERICAN ROADWAY DESIGN IN THE ROMANTIC ERA



Some of the earliest examples of roads designed specifically for leisure and enjoyment in the United States were developed in the early nineteenth century for the new landscape cemeteries. These cemeteries, a dramatic departure from the austere and utilitarian graveyards of the colonial era, created bucolic retreats just outside crowded city centers—designed as much for pleasurable outings as for burying grounds. The first, Mount Auburn Cemetery in Cambridge, Massachusetts (consecrated in 1831), had a well-developed network of carriage drives. The sinewy routes provided ever-changing views of lush plantings, ponds and lagoons, and ornamental trees—and the well-groomed surfaces of the roads offered a pleasant ride. Designed by Massachusetts Horticultural Society President Henry A. S. Dearborn and

civil engineer Alexander Wadsworth, the carriage drives were thoughtfully aligned to the natural topography of the site and named for plants.

Romantic cemeteries in Brooklyn, Baltimore, and Cincinnati would quickly copy Mount Auburn's innovative design, introducing the romantic landscape and pleasure driving to an even larger public audience. The cemeteries became favored destinations for Sunday drives and picnics and provided the first visible, and popular, expression of Romantic Era landscape design in the United States.

As the cemetery movement spurred an interest in new concepts for landscape design, Repton's ideas, and those of the English Landscape School, were introduced to the American public largely through the writings and influence of

Andrew Jackson Downing (1815-1852). A fierce proponent of the natural beauties and wild qualities of North America, Downing built on the English style, with its naturalistic plantings and curvilinear forms, and introduced an appreciation for a distinctly American landscape.

This style, valuing highly unique landscape features, and views and vistas, sculpted the landscape with a keen eye to the visitor's experience. Showcasing a view required

carefully staging the approach to a particular vantage point—thus circulation within the landscape (footpaths, carriage drives, and avenues) was key. Scenic carriage drives constructed in the nineteenth century marked the start of the American embrace of pleasure driving. For the first time, roads were constructed for no other purpose than the provision of scenic views and attractive prospects.



IN AMERICA, SCENIC DRIVING WAS FIRST INTRODUCED IN THE BEAUTIFULLY LANDSCAPED CEMETERY. PLAN FOR MOUNT AUBURN CEMETERY, CAMBRIDGE, MASSACHUSETTS, C. 1848. COURTESY OF LIBRARY OF CONGRESS.



THIS 1859 LITHOGRAPH SHOWCASES PICTURESQUE BOULDERS AND WINDSWEEP VEGETATION—FASHIONABLE LANDSCAPE ACCENTS DURING THE ROMANTIC ERA. THE OBVIOUS SLOW PACE OF THE CARRIAGE SUGGESTS A FAMILY OUTING FOCUSED ON SCENIC ENJOYMENT AND LANDSCAPE APPRECIATION. NOTE THE COUNTRY ESTATE HOUSE NESTLED IN A COPSE IN THE DISTANCE. "LIFE IN THE COUNTRY," CURRIER AND IVES, 1859. COURTESY OF LIBRARY OF CONGRESS [DIGITAL ID: PGA 00810].



In his widely read and influential book, *A Treatise on the Theory and Practice of Landscape Gardening Adapted to North America With a View to the Improvement of Country Residences*, Downing quotes the eight principal requisites for roads in the “modern style” as developed by Repton, a man he calls “one of the most celebrated English practical landscape gardeners.”⁸ While these eight principles focus primarily on the approach to the house, they clearly establish the theory behind the development of a curvilinear circulation system and its logical placement within the larger landscape. In particular, Downing notes Repton’s theories for routes that are logical and based on physical landscape forms—natural or artificial: “As soon as the house is visible from the approach, there should be no temptation to quit it (which will ever be the case if the road be at all circuitous), unless sufficient obstacles, such as water or inaccessible ground, appear to justify its course.”⁹ It is important to note the negative connotation he ascribes to “circuitous,” suggesting curvilinear forms simply for the sake of form, without logical physical rationale, detract from the visitor’s experience of the landscape.

Andrew Jackson Downing himself wrote extensively on the design and laying out of pleasure drives as an integral part of landscape design and appreciation and noted their use for exercise as well:

The Drive is a variety of road rarely seen among us, yet which may be made a very agreeable feature in some of our country residences, at a small expense. It is intended for exercise more secluded than that upon the public road, and to show the interesting portions of the place from the carriage, or on horseback. Of course it can only be formed upon places of considerable extent; but it enhances the enjoyment of such places very highly, in the estimation of those who are fond of equestrian exercises. It generally commences where the approach terminates, viz. near the house: and from thence, proceeds in the same easy curvilinear manner through various parts of the grounds, farm or estate. Sometimes it sweeps through the pleasure grounds, and returns along the very beach of the river, beneath the fine overhanging foliage of its projecting bank; sometimes it proceeds towards some favorite point of view, or interesting spot on the landscape; or at others it leaves the lawn and traverses the farm, giving the proprietor an opportunity to examine his crops, or exhibit his agricultural resources to his friends.¹⁰

It would be Downing who would bring English architect Calvert Vaux (1824-1895) to the United States. Vaux and Frederick Law Olmsted would advance the design and technology of carriage drives and lay the foundations for modern highway design at New York's Central Park.

THE CENTRAL PARK

Not surprisingly, carriage roads were a significant feature of the design for

Central Park in New York City. Here Frederick Law Olmsted and Calvert Vaux continued the tradition of curvilinear alignments and romantic views but also introduced sophisticated engineering principles in vertical alignment that allowed the carriage roads to pass over and under the park's pedestrian paths and bridle trails to minimize intersections of conflicting interests and activities—allowing the maximum enjoyment of the park landscape by each user group.

Pleasure driving was becoming extremely popular in America, and Central Park with its well-designed roads was an ideal destination for carriage drives. The following extended quote, appearing in the *New York Times* shortly after the Central Park carriage drives first opened to the public, is included to show the popularity and almost giddy excitement by which pleasure driving was embraced (and reported) in the park.

On the broad carriage-road, whose surface was like polished steel, was a long line of carriages filled with gay, laughing people. Fast young men in sulkies [a light two-wheeled, one horse carriage for one] whose huge wheels almost topped the head of the driver, with clean-cut, well-shaped, bob-tailed nags scud along the road as if the old Harry was after them: huge, heavy, substantially-built family carriages with gilded lamps, gilded hubbed-wheels, and high, well covered seats, drawn slowly, sedately and dignifiedly by heavy, long-bodied, long-tailed, thick maned horses, contained elderly ladies dressed in black silk, lace caps and false curls, accompanied

by one or two younger ladies, who sat generally on the front seat, wearing English baréges, coal-scuttled bonnets, or cloudy Nubias [a light head scarf], and who looked after the afore-mentioned fast young men as if they would like to change places for just a little while, it would be “so nice” and such fun; then would pass a mad-dashy barouche [a stylish touring carriage] with top thrown back, filled with chattering girls whose mammas had remained at home, and who were bent on having a good time, and who seemed mightily tickled whenever they met one of those comet-like sulkies or when, as was frequently the case, they were joined by some young blood on horseback, who exhilarated by riding, could bend gracefully and whisper gallantly, or by his lively conversation keep the ball of fun rolling with increased velocity... In fact, there is no place in the country, or as far as we have seen in any other, where driving can be so perfectly enjoyed as on the avenues and broad roads of the Central Park...¹¹

In addition to the sophisticated and elegant alignment of the carriage drives, Olmsted and Vaux imported the latest technology in road building—constructing the roads in the Telford method from England. Work on paving the roads commenced in 1869. Paying particular attention to the construction of the park drives, Olmsted noted:

Roads of binding gravel are always excellent—better for pleasure-driving than

any other—so long as their foundation is firm and unyielding. Ordinarily, however, the earth below works up every Spring [sic], and the whole road becomes soft and rutty. It is very commonly attempted on private grounds to provide against this by laying a stratum of stone under the gravel, which, if the road is much used, serves only to increase the evil, for the gravel stone sinking through the clay more readily than the larger stone, the latter, in obedience to a well-known law, work to the surface. There is one method of using large stones, however, which was first practised by Telford on the Holyhead road, and which supplies a perfectly unyielding road foundation.¹²

Olmsted and Vaux’s attention to the construction technology was important to their desired success for the carriage drives in the park. Most roads in the United States during this period were in poor condition. The few paved roads were generally in urban settings and in varying degrees of repair—most, including the cobbled streets of many cities, were wholly inappropriate for relaxing or pleasure driving due to their rough surfaces. Olmsted knew the concept of pleasure driving was wholly dependent on the provision of a smooth surface over which to travel. Pleasure drives at Central Park and other parks represent some of our earliest efforts at sophisticated engineering design and materials technology through advancements in surface treatments.

NEXT PAGE: PEDESTRIAN PROMENADES AND CARRIAGE DRIVES IN CENTRAL PARK, NEW YORK. “THE GRAND DRIVE, CENTRAL PARK N.Y.,” CURRIER AND IVES, 1869. COURTESY OF LIBRARY OF CONGRESS [DIGITAL ID: PGA 00737].





BUILDING RELIABLE ROADS

The science of road building was significantly advanced at the end of the eighteenth century in Europe, laying the foundation for modern paving technology. Three principal engineers, Pierre-Marie Jérôme Trésaguet (1716-1796), Thomas Telford (1757-1834), and John Loudon McAdam (1756-1836), developed road construction techniques and theories that were imported to the United States in the early nineteenth century.

Trésaguet, who came from an engineering family, was appointed Director General of bridges, roads, and municipal works in France in 1775. France was generally considered to have the finest, best constructed, and best maintained road network in Europe. One of Trésaguet's major contributions to modern paving technology was the introduction of angular stone, rather than rounded gravel. The sharp faces of broken angular stone bound together form an interlocking structure.

The Trésaguet method was used for the first segments of the National Road in Maryland and Pennsylvania. While the system worked well for France's well-financed and impeccably maintained road network, it did not perform well on the heavily traveled and under-financed National Road. Trésaguet's top surface of protective gravel, intended to be regularly raked, quickly wore away and exposed the foundation structure, leading to road failure.

Telford, a stonemason from Scotland who ultimately founded the British Institution of Civil Engineers, first became involved with the science of road building when

commissioned by the British government in 1801 to report on transportation measures to halt the population exodus from the Scottish Highlands. Nicknamed the "Colossus of Roads," Telford supervised the construction of 90 miles (145 kilometers) of road in the Highlands and would direct the Holyhead Road Commission between 1815 and 1830.¹³ Telford built on the work of Trésaguet, reconsidering the foundation and improving drainage.

Telford's system relied on an impervious surface structure to prevent water from weakening the construction. He also raised the pavement structure above the surrounding ground or drained the nearby area if elevating the road wasn't practicable. A heavy "cambered" (sloped) foundation of stone blocks, installed on flat ground, created the crown to ensure good drainage and provided long-term stability for the road. New York City employed the Telford method in the construction of city streets in the early nineteenth century,¹⁴ and it would be recommended as the pavement of choice by Olmsted in the "Greensward" plan he and Vaux submitted for the Central Park competition in 1858.

The Telford method was durable and reliable, but it was expensive to construct.

McAdam developed the first practical and affordable modern road construction process, and his name is still remembered today when we reference "macadam" pavements. McAdam, unlike Trésaguet and Telford, was familiar with the United States, having lived in New York for thirteen years as a young man. He first became

involved with roadmaking as a trustee of the Ayrshire Turnpike in Scotland in 1787. He was appointed surveyor of roads for the Bristol Turnpike in 1816. He wrote a booklet, “Remarks (or Observations) on the Present System of Roadmaking,” in 1816 and “A Practical Essay on the Scientific Repair and Preservation of Public Roads” in 1819. His great

A key to the success of the surface was that the 20mm stone size was much smaller than the 100mm [approximately 4 inches] width of the common iron coach tire.¹⁵

Unlike Telford’s flat excavated base, with the stones forming the camber, McAdam insisted that the base soil excavation for the road could form the camber. Like Telford, he elevated the road above the water

As the parks movement spread across the nation and cities continued to grow, the new advances in pavement technology would be implemented....

contribution was in the development of a road-building system that did not require the heavy stone structure base of the earlier systems—arguing that a layer of broken angular stones would behave as a coherent mass. Historian Maxwell Lay explained:

Stone size was an important element in the McAdam recipe. For the lower 200mm [approximately 8 inches] thickness of the pavement, the maximum size was commonly 75mm [approximately 3 inches]. However, for the upper 50mm [approximately 2 inches] thick surface course the stone size was limited to 20mm [approximately ¾ inch]. Indeed, the stone had to be small enough to fit into the stonebreaker’s mouth and was checked by supervisors, who carried in their pockets a set of scales and a stone of the correct mass.

table—good drainage was essential to the correct functioning of the construction.

McAdam’s process was first used in the United States on the Boonsboro Turnpike in Maryland in 1822 and would soon become the standard pavement for the National Road and the nation. His pavement solved the vexing problem of narrow iron wheels on vehicles traveling at relatively high speeds gouging and causing rutting of the roads. McAdam’s angular interlocking stone surface, or road metal, was made of stones averaging less than one inch. (It was difficult for the carriage wheels, averaging four inches in width, to have as severe a negative impact on the surface.) While effective, the paving process was labor intensive, requiring larger rock to be broken by hand to create the angular gravel. It would not be until

1858, when the first practical mechanical stone crusher was patented by Eli Blake, that road gravel (for all construction methods) became commercially viable. Blake's steam-powered crusher, built in Connecticut, produced stone for Central Park's carriage roads.¹⁶ About the same time, the first mechanical steam-powered rollers were being developed in Britain.

The first steam-powered roller in the United States was imported from England in 1869 to help construct the carriage drives at Central Park. The *New York Times* reported:

*A party of engineers assembled at the Central Park yesterday morning to witness the operation of a steam road and park roller, imported from England, and manufactured by Aveling & Porter, of Rochester, Kent. The machine comprehended an ordinary steam engine of ninety-horse power, with a wide roller in front, divided in two parts and two rollers behind, widely divided by the engine. The whole weighed fifteen tons, and performed the service required effectually and economically... Mr. Green, Superintendent of the Central Park, was present, together with Mr. Stranahan, of Prospect Park, Brooklyn, and several gentlemen interested in laying out the parks of other cities.*¹⁷

As the parks movement spread across the nation and cities continued to grow, the new advances in pavement technology would be implemented along with the new boulevards and avenues accompanying the growing urban populations.

GRAND WAYS

Inspired largely by the urban parks movement, many cities undertook the development of parkways or boulevards during the second half of the nineteenth century. In general, these grand ways were broad formal avenues or boulevards, with extensive rows of trees and commodious pedestrian promenades and walks. Grand ways, while often connecting or serving park areas, were nevertheless primarily urban features. While occasionally termed "parkways," they served more as attractive landscaped connections to public parks than the curvilinear routes within extensive protected parklands and natural settings, as parkways would come to be defined in the twentieth century.¹⁸

Robert Morris Copeland (1830-1874) was a noted landscape gardener and author of *Country Life: A Handbook of Agriculture, Horticulture, and Landscape Gardening* published in 1859. Like Downing, he wrote extensively on the design and location of carriage drives and was one of the most accomplished individuals in the design of grand urban thoroughfares. Copeland's work included the design and laying out of grounds for country estates, public parks, and cemeteries, as well as town planning and road design throughout New England. He is credited with assisting architect Arthur Gilman in the layout of Boston's Back Bay in 1856 and with developing the boulevard concept for Boston's Commonwealth Avenue. Copeland, with H.W.S. Cleveland, designed Sleepy Hollow Cemetery in Concord, Massachusetts, and in 1858 Copeland and Cleveland



COMMONWEALTH AVENUE, BOSTON C. 1903. PHOTO COURTESY OF LIBRARY OF CONGRESS.

submitted an entry for the Central Park design competition in New York.

Copeland was intensely engaged in the parks debate for the City of Boston. He made numerous recommendations for a comprehensive municipal and metropolitan park system and suggested linking the park units by a broad avenue or parkway “100 to 200 feet wide, which,” he said:

should, like the circumference of the circle, give boundary and form to the whole city, and be so connected by radial lines that from all parts to all parts there would be direct and easy avenues of communication, and the main avenue or boulevard would thread as it were all the parks and public grounds and bring them into a common system, and give a beautiful and convenient drive for the citizens in the different parts of the environs.¹⁹

Copeland’s concepts for an integrated system of attractive avenues would be echoed by landscape architect Charles Eliot in the 1890s when the Metropolitan Park Commission was considering the creation of “parkways or boulevards” between the different units of the planned regional park system around Boston. Eliot had apprenticed in Olmsted’s office

in Brookline, Massachusetts and was involved with Olmsted’s design work for the park avenues of the Fenway, Riverway, Jamaicaway, and Arborway connecting Boston’s “Emerald Necklace” parks in the 1880s—Olmsted’s last great park planning project.

Olmsted’s influence on roads designed for pleasure cannot be underestimated both in executed projects and his extensive writings on the design and character of public roads. After the successes of Central Park and Prospect Park in Brooklyn, Olmsted developed parkway systems for Louisville, Kentucky, and Buffalo, New York, and worked on conceptual plans for the park boulevards in Chicago. In Buffalo, Olmsted developed an elegant system of parkways and circles from a plan begun in 1868. The road network was largely constructed by 1876.

In his 1866 report, “Preliminary Report in Regard to a Plan of Public Pleasure Grounds for the City of San Francisco,” Olmsted, under a section of the report titled “The General Promenade,” provided detailed recommendations to create a grand avenue from the existing Van Ness Avenue as part of the park concept:

There would remain a space to be given up to the promenade and ornamental ground 280 feet wide. Within this an excavation would be made, varying in depth a little, according to the shape of the surface, but everywhere at least twenty feet deep. The sides of the excavation should slope so as to have a nearly level space at the bottom 152 feet wide. In the centre of this might be formed a mall 24 feet wide, flanked on each side by a border, to be used as will hereafter be described. Between the borders and the foot of the slopes might be two roadways, each 54 feet wide, 15 feet being made of loose sifted gravel, as a pad for saddle horses, and the remaining 39 feet finished with hard rolled gravel for carriages.²⁰

Similar to Central Park's innovative accommodation of cross-town traffic by sunken traverse roads, San Francisco's cross-city traffic would be carried over the Van Ness Promenade by a series of bridges. The plan was never implemented.

In his 1866 "Report Upon a Projected Improvement of the Estate of the College of California (the University of California), at Berkeley, Near Oakland," Olmsted wrote extensively on the need for an attractive road network to organize the town and provide pleasant approaches to the new college. He strove to take advantage of the natural features of the site, while developing a plan of scenic and pleasure drives for the neighborhoods surrounding and larger public approaches to the new college.

The third is by a new road which I recommend should be laid out as a pleasure drive from Oakland. This road

would be to the southward of, and run parallel with the present Telegraph road, until after it has passed the vicinity of the new cemetery, where it would curve upon a long radius to the left, and passing to the eastward of some of the lowest foot hills, cross the Telegraph road near the foot of the mountains, and approach Berkeley on a line parallel with the range, passing along the east side of the public garden, and reaching the vicinity of the College without entering the village, as shown upon the plan. Such a road would form a drive much more attractive than any now in use out of Oakland, and would lay open a most desirable region for residences along the foot of the mountains....²¹

After providing details, analysis, and recommendations for a pleasure drive between Oakland and Berkeley, Olmsted devoted considerable attention to the design and nature of the roads within the new community. It is important to note that he focused both on function ("sufficiently direct") and picturesque qualities ("sylvan and rural character"):

The extent of the sylvan lanes would be about five miles. At several points upon them there would be very fine distant views, each having some distinct advantage. The local scenery would also at many points be not only quite interesting, even without any effort to produce special effects by planting, but it would have considerable variety, much more so than might be supposed from the drawing. The road is designed to be laid out in such a way as to make the most of the natural features, while preserving their completely sylvan and rural character, being carried with



LAKE SHORE DRIVE, CHICAGO, ILLINOIS, 1905. CHICAGO'S GRAND WAYS ADHERED CLOSELY TO THE POWERFUL GRID THAT ORGANIZED THE CITY. PHOTO COURTESY OF LIBRARY OF CONGRESS.

*frequent curves in such a way as to make the best use of the picturesque banks of the arroyos and the existing trees upon them. These are sometimes allowed to divide it into two parts. Notwithstanding the varied curves which the arrangement involves, the general course of the lanes will be found simple and the connection between the more important points sufficiently direct. This is especially the case with the approaches to the College site from the points nearest it at which the neighborhood is entered.*²²

Another notable landscape architect, George E. Kessler (1862-1923), designed park and parkway systems in Kansas City, Missouri; Denver, Colorado; Indianapolis, Indiana; and Memphis, Tennessee. A transitional figure, designing for both horse and carriage, and automobile, Kessler's designs are more associated with grand ways than the automobile parkways of the early twentieth century.

THE MINNEAPOLIS PLAN

Of all the grand ways constructed during this period, the "Grand Rounds" (National Scenic Byway, 1998) in Minneapolis was one of the most noteworthy.

A parkway and boulevard system was constructed in Minneapolis based on the 1883 report, "Suggestions for a System of Parks and Parkways for the City of Minneapolis," prepared by landscape architect H.W.S. Cleveland. Cleveland, a close friend of Olmsted and associate of Copeland, had distinguished himself in Chicago with his 1869 publication "Public Grounds in Chicago: How to

Give Them Character and Expression." In Chicago, he took the unusual landscape approach of arguing for straight avenues and boulevards to complement the prairie topography and ubiquitous grid pattern of the city. Minneapolis, by contrast, presented him a landscape palette of varied topography overlain with a city grid and punctuated with numerous lakes. Here, Cleveland adeptly mixed serpentine drives with broad razor-straight avenues—the complete system, ideally suited to the natural and built landscape was quickly dubbed the "Grand Rounds" by William Watts Folwell, the first president of the University of Minnesota. The Minneapolis boulevards and avenues represented one of the first comprehensive systems of grand ways integrating multiple park units and residential districts within a larger metropolitan setting.

The landscape and engineering innovations at Central Park and the Grand Ways of cities like Buffalo, Chicago, Denver, and Minneapolis would lay the foundation for twentieth-century highway design, as expressed in the first great scenic automobile roads: the Bronx River Parkway and Columbia River Highway. Before this could happen, however, the democratization of individual travel, first through the bicycle and soon after through the mass-produced automobile, would need to occur—raising a national rallying call from the general populace for good roads. ★

To be continued...

Part II of this article will appear in the next issue.

Please note that historical quotes contain historic spellings (shew instead of show, for example) and British-English spellings (practised vs. practiced, for example). Historic spelling and incorrect grammar are noted with a [sic] comment.

The Author

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Notes:

¹ Albert Gallatin, "Report of the Secretary of the Treasury on Roads and Canals," S. Doc. No. 250, 10th Congress, 1st Session, 1808, p. 895.

² America's Highways, 1776-1976, (U.S. Department of Transportation, Federal Highway Administration, 1976), p. 10.

³ Indiana's segment was designated a National Scenic Byway in 1998; Illinois' in 2000; the entire six-state route including Maryland, Pennsylvania, West Virginia, and Ohio was designated an All-American Road in 2002.

⁴ The nineteenth-century views of the aesthetic triangle are rooted in William Hogarth's *The Analysis of Beauty*, published in 1753 and Edmund Burke's *Inquiry into the Origin of Our Ideas of the Sublime and Beautiful*, published in 1756.

⁵ John Dixon Hunt, *Gardens and the Picturesque*, (Cambridge, Massachusetts: MIT Press, 1992), p. 161.

⁶ Edward Malins, *The Red Books of Humphry Repton*, (London: Basilisk Press, 1976), (this is a reproduction set of manuscripts and has no page numbers).

⁷ Thomas Whately, *Observations on Modern Gardening*, (London, Printed for T. Payne at the Mews-gate, 1770), p. 140.

⁸ Downing, *A Treatise on the Theory and Practice of Landscape Gardening* (Dumbarton Oaks Trustees for Harvard University, 1991 reprint: 4th ed. New York: Putnam, 1850), p. 339.

⁹ *Ibid.*, p. 339.

¹⁰ *Ibid.*, pp. 341-342.

¹¹ "A Day in the Central Park," *New York Times*, April 15, 1860. Emphasis added.

¹² Charles Beveridge, ed., *The Papers of Frederick Law Olmsted, Volume III: Creating Central Park*, (Baltimore: The Johns Hopkins University Press, 1983), p. 155. Emphasis added.

¹³ Frederick Law Olmsted would cite the Holyhead Road in the submission plan for Central Park.

¹⁴ Lay, M. G., *Ways of the World: A History of the World's Roads and the Vehicles That Used Them* (New Brunswick: Rutgers University Press, 1992), p. 80.

¹⁵ *Ibid.*, p. 77. Emphasis added.

¹⁶ *Ibid.*, p. 86.

¹⁷ "A Steam Road Roller," *New York Times*, June 5, 1869.

¹⁸ The definition of a parkway is widely attributed to Norman T. Newton as described in *Design on the Land* (Cambridge, Massachusetts: Harvard University Press, 1971), p. 597.

¹⁹ *Boston Daily Advertiser*, Oct. 24, 1873. Emphasis added.

²⁰ S. B. Sutton, ed., *Civilizing American Cities: Writings on City Landscapes: Frederick Law Olmsted*, (New York: Da Capo Press, 1997), p. 126.

²¹ *Ibid.*, p. 286.

²² *Ibid.*, p. 286-287.