

ROAD-BUILDING TIMELINE for US HISTORY

prepared by Hillel Schwartz, Archivist, Encinitas Historical Society
and Susan Sage, for the Public Goods Initiative at EHS
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All entries specific to Encinitas are indicated in blue.

Cautionary Note: "firsts," whether of dates, persons, or places, are regularly disputed across states, nations, and continents. Debates over priority are viable for three reasons. Firstly, many roads follow indigenous trails established and maintained by generations of Native Americans. Next, innovations often appear anonymously well before something similar is documented or patented. Finally, new materials, devices, systems, or ideas often pop up simultaneously across the world, the inventors unknown to each other.

- 1600s Pequot Path/Trail, a Native American construction,¹ runs from Boston to New York, widened and renamed in the 1670s by English colonists as the Upper and Lower Boston Post Roads--referring to their primary use as routes for delivering mail.
- 1645 Old Connecticut Path, Bay Path from Boston to Springfield.
- 1650-1735 King's Highway laid out along 1300 miles from Boston MA to Charleston SC, usually along existing Native American paths, with segments differently named.²
- 1673 Upper Post Road (Boston Post Road, now US Rte 1, Rte 5) connects Boston and NYC.
- 1697 Jesuits establish Mission Loreto, next to Conchó, a Native settlement. This is the first of 17 missions built in Baja California, connected by indigenous footpaths which become a wider dirt trail as Jesuit missionaries and Spanish soldiers, with their horses, carts, and supply wagons, traverse what they will call El Camino Real.³
- 1761 Postmaster General Benjamin Franklin orders milestones to be placed along the route from Boston to Saco, Maine, northern extension of the King's Highway, and inspects the roads used for delivering mail, in so doing inventing the odometer to measure mileage. (Wikipedia)
- 1767 Jesuits, expelled from all Spanish territories by order of Carlos III, are replaced by Franciscans and Dominicans in Spain's Christianizing mission program.
- 1769 (March) Franciscan padre, Junipero Serra, Spanish soldiers, Indian guides and (forced) laborers follow indigenous trails up from Loreto in Baja California, founding Mission San Fernando de Velicatá before crossing the Arroyo de Tía Juana to found the first mission in Alta California, San Diego de Alcalá. The Tiajuana River, supposedly named after the Rancho Tía Juana land grant of 1829, was a seasonal waterway whose name more likely derived from the Kumeyaay word *Tiwan* ("by the sea").
- 1769 Spanish land expedition (part of the Gaspar de Portolá expedition), as documented by Father Juan Crespí, follows indigenous paths up from San Diego to San Francisco. In mid-July, the expedition arrives at east end of a lagoon they name "Batiquitos," from *batequi*, a northwestern Mexican term for a watering hole dug in a stream bed, in turn from the native Yaqui *bate'ekim*. <Crespi; Wikipedia, citing Beller.
- 1776 Spanish troops, laborers, and priests move back and forth by land between San Diego and a new (7th) mission a-building at San Juan Capistrano, in practice establishing the southernmost portion of the El Camino Real of Alta California.⁴
- 1783 Levi Pease introduces successful long-distance US stagecoach service (Connecticut).
- 1786-98 In New England, 59 toll bridge companies are chartered.
- 1792-95 Philadelphia and Lancaster Turnpike chartered and built, featuring a hard surface of broken stone and gravel.⁵
- 1792 New York City starts using whale oil in city street lamps.
- 1795 South Hadley Canal, on Connecticut River, becomes the first navigable canal in US.
- by 1800: Perhaps 69 turnpike companies chartered in the US, 23 in CT, 13 in NY.

- 1802 Corps of Engineers at West Point becomes a permanent branch of US Army.⁶
- 1804 Obadiah Elliott of London patents the elliptical (or laminated) leaf spring for carriages, smoothing out the ride and serving as the basis for generations of developments in carriage and automobile suspension. (Wikipedia)
- 1806 National Road/Cumberland Road--a concept promoted by Albert Gallatin, Sec of the Treasury under Thomas Jefferson and then Madison--is funded by Congress, to be built in stages from Maryland west to the Ohio River.⁷
- by 1810: 398 more turnpikes incorporated (=27% of all business incorporations: eh.net)
- 1811 Contract for construction of first ten miles of the National Road.
- 1816 John Loudon McAdam, a Scottish civil engineer, devises new paving: crushed stone bound with gravel on a base of large stones, cambered for drainage. These "macadam" roads will be used to complete the National Road in 1830s.⁸
- 1817 Baltimore is first city to install gas lights on some streets. Other cities follow.
- 1824 Portland Cement patented in UK, essentially reinventing Roman concrete.⁹
- 1825 Erie Canal completed, 363 miles financed through issuance of public bonds.
- 1830 Baltimore & Ohio RR enters service as first US railroad chartered as a common carrier.
- 1830 South Carolina Canal & RR Co is first to employ steam locomotives regularly.
- 1832 Horse-drawn streetcars (or trolleys) debut in NYC.
- 1832-39 Robert Anderson, Scottish inventor, builds and drives first electric vehicle, a small carriage with non-rechargeable batteries. Thirty years later, in 1865, Gaston Planté will invent rechargeable lead-acid batteries.¹⁰
- 1834 John Henry Cassell stabilizes road surfaces with tar spread on a subgrade of crushed stone, then a macadam layer, then a sealant of tar and sand. He calls this pavement "lava stone"--better known as "tarmac."¹¹
- 1839 First cast-iron railway bridge, Brownsville PA .
- 1847-1850+ US Army begins surveying [Alta] California, a project that continues for decades with coastal surveys performed by the US Coast and Geodetic Survey. The Gold Rush spawns government and commercial geological surveys, which also aid in the plotting of roads, as do private surveying teams hired by investors in new rail lines from the east or up and down California.¹²
- 1849 Reinforced concrete is invented by Joseph Monier, primarily for house construction.
- 1849 Wells, Fargo stagecoaches begin running in California, San Francisco to Sacramento.
- 1852 Phineas Banning inaugurates stagecoach line between Los Angeles and San Diego.
- 1854 Arcata and Mad River Railroad provides first railroad service in California.
- 1856 Sacramento Valley Railroad, first RR incorporated in Calif (1852), service in Feb 1856.
- 1855 Pacific Railroad Surveys by US Government surveyors.
- 1855-1871 Federal government makes land grants to prospective new railways heading West from Chicago & St Louis.
- 1858-61 Butterfield Overland Mail stagecoaches, which had brought mail from the East to San Francisco, LA, and San Diego, were bought out by Wells, Fargo Company, which ran larger, 15-passenger stagecoaches.¹³
- by 1859, US has 9000 miles of railroad track.
- 1859-60 Lemoine and Ballaison demonstrate a steam-powered roller for compacting stone and smoothing asphalt paving, soon manufactured by E. Gellerat and Co. (Paris). Asphalt is promoted by Napoleon III of France "because an asphalt surface made it more difficult for revolutionary mobs to tear up the granite paving blocks to build barricades on the streets." First British patent on a road steamroller, 1863. The Park Commissioners of Brooklyn NY purchase an Aveling and Porter steamroller (Kent,UK) in 1869, first of 160 A&P sales in US.¹⁴

- 1860s Manhole covers, in use since the Roman Empire, are now manufactured in cast iron, engraved with patterns to aid road traction or with raised lettering identifying maker, city &/or purpose (e.g., access to subsurface sewage, water, gas, electrical pipes).¹⁵
- 1862 Pres. Abraham Lincoln signs Pacific Railway Act to build first transcontinental railroad.
- 1862 Union Pacific and Central Pacific Railroad Companies are chartered.
- 1863-65 Union Army after the Battle of Shiloh and during Sherman's march through the Carolinas reverts to building corduroy roads, made by placing logs perpendicular to direction of traffic, esp. over swampy ground. "Corduroy" refers to the similarity of log ridges to the ridges (wales), of 18th-c. corduroy cloth, but such timber tracks had been laid for millennia.
- 1867 First US patent for a railroad crossing gate, J Nason and J Wilson of Boston.¹⁶
- 1868 Self-propelled steam traction engines (tractors) first mass-produced.
- 1868-71 In 1860, Andrés Ybarra sells Rancho Los Encinitos to San Diego merchants Joseph Mannasse and Marcus Schiller for \$3000. Their friend Alfred L. Seeley in 1868-69 arranges to use Ybarra's adobe home as a stop on his new United States Mail Stage, a reliable stagecoach route as of 1871, when Seeley's Concord stagecoach, pulled by four horses, would pull out of the Continental Hotel in San Diego at 5 a.m and reach Los Angeles 35 hours later after making stops in San Dieguito and Encinitas before turning inland to what is now "Stagecoach Park," then on to San Luis Rey, Las Flores, San Juan Capistrano, Anaheim, Los Nietos, and LA.¹⁷
- 1869 Union Pacific, laying track from the East, meets Central Pacific arriving from the West, to complete first transcontinental railroad, at Promontory Summit, Utah.
- 1870 Thrice-weekly stagecoach service operates between LA and SD under A. L. Seeley.
- 1870 First modern asphalt road is laid by Belgian chemist Edmund J DeSmedt in Newark, NJ. He later paves Pennsylvania Avenue in DC.¹⁸
- 1870 First brick road is laid in Charleston, West Virginia, by Mordecai Levi as a solution to ever-muddy streets.¹⁹
- 1873 SF reports massive horse-and-buggy "traffic jam," but phrase itself dates to 1890s.
- 1875 Joseph Monier builds first concrete reinforced bridge.
- 1878 Charles F. Brush invents dynamic electric arc lamps, used to light streets in Cleveland.
- 1878 First city-to-city (steam-powered) auto race in US, from Green Bay to Madison WI; winner makes average speed of 6 mph over 201 miles.²⁰
- 1878 "Rush hour" phrase coined by the New York Herald with regard to the busiest periods of commuting by public transit, years before automobiles. (OED)
- 1879 Bollman Truss Bridge in Savage, MD is the first iron truss bridge in US.
- 1879 Massive "blockade" (traffic jam) on Broadway in Manhattan²¹
- 1880 League of American Wheelmen is founded in Newport, RI.
- 1880 Wabash, Indiana, then New Orleans install brush arc lighting system for city streets.
- 1880-85 The word "roadmap" enters dictionaries.
- 1881 First electric street car system created in Berlin, Germany.
- 1883 J Pitcher plats Encinitas streets.
- 1884 Philadelphia has 535 miles of paved street, 93% of which are cobblestone.²²
- 1884 February: Coastal North County roads and bridges vanish under a year's worth of rain (13") that falls in just two weeks.
- 1885 John Kemp Starley invents Safety Bicycle (earlier, similar design: Lawson Bicyclette, 1876). During the 1890s, more than 5,000,000 Americans learned to ride the Safety Bicycle, with its gear-driven rear wheel, lower seat stem, and greater stability than high-wheelers. With far more men AND women on city and rural roads as "drivers" comes ever-greater social and political pressure for better, safer roads.²³
- 1886 Karl Benz patents his Motorwagen, first gas-powered auto. Top speed: 10 mph.
- 1886 This year the Oxford English Dictionary attests to the use of the phrase "Road hog."

- 1886-87 Leucadia is platted & streets named by Leucadia Land & Town Co (Combination Land Co), led by Thomas Fitch and H. A. Howard.
- 1886-88 Montgomery, AL, Scranton PA, Omaha NE, Richmond VA, and Los Angeles develop electric street car systems. (->Wikipedia)
- 1887 S. F. Bowser (Fort Wayne, IN) patents a free-standing pump designed to dispense and measure both kerosene and petroleum. He then devises a pump for grocery stores and by 1905 adds a hose attachment for directly pumping gas into a fuel tank. The device becomes known as a "filling station," which term is soon transposed to auto "garages" that sell gasoline via pumps.²⁴
- 1887 Caliper brakes for bicycles are patented by Browett and Harrison.
- 1887-88 John Boyd Dunlop, a Scottish veterinarian living in Ireland, devises pneumatic tires for his son's tricycle, patents and perfects them. With industrialist and cyclist Harvey Du Cros, he manufactures them for bicycles and automobiles.²⁵
- 1889 Lithographed 24-sheet billboards are introduced at the Paris Exposition, and then at Chicago's World Fair in 1893, becoming the standard throughout US and Europe.
- 1889 First reinforced concrete bridge, Alvord Lake Bridge in Golden Gate Park (SF), is built by engineer Ernest L. Ransome, who pioneers the use of rebar (twisted steel bars); the bridge is still standing and safe.
- 1889 San Diego County Board of Supervisors creates a Board of Public Works whose primary responsibilities are to keep roads clear of debris and waste and to ensure all thoroughfares are properly watered, so as to forestall the "dust menace."
- 1890 Gottlieb Daimler, inventor of high-speed liquid petroleum-fueled engine, teams up with Wilhelm Maybach to form the Daimler Motoren Gesellschaft; in 1926, a merger with Benz leads to the Mercedes-Benz car.
- 1892 National League for Good Roads branches out from League of American Wheelmen.²⁶
- 1892 [Encinitas Transcript](#) boasts of a "fine three-mile drive" from Cottonwood Creek to the La Costa Lake, now known as Batiquitos Lagoon.
- 1892 John Froelich of Iowa designs first working gas-powered tractor, but it is the Waterloo Gasoline Traction Engine Co. that in 1915 arrives at a design that farmers like.²⁷
- 1893 [Good Roads Magazine](#) launches.
- 1893 Duryea Brothers test first US gas-powered vehicle; begin sales in 1896.
- 1893 US Office of Road Inquiry is created as federal government's first response to the national campaign for Good Roads.
- 1893 RFD Mail Service (rural free delivery) begins.
- 1893 First concrete road pavement laid in US, in Bellefontaine, OH.²⁸
- 1895 "Motocycles" appear in "Race of the Century" on 28 November in Chicago, basically bicycles with motors. By 1903 both the Hendee Mfg Co (later, Indian Motorcycle Co) and Harley-Davidson have been founded. "Motorcycle" is a somewhat later spelling.²⁹
- 1895-96 California Bureau of Highways is created by Governor James Budd.
- 1896 BF Goodrich introduces pneumatic tires for cars (invented by Michelin 1895).
- 1896 Walter Arnold in East Peckham, Kent, England, on 28 Jan is first person in world to be issued a speeding ticket when spotted going 8 mph, four times the speed limit; he is pursued for 5 miles by police constable on a bicycle.³⁰
- 1896 First reported death by automobile, in London, when Bridget Driscoll, wife of a laborer, is run over by Arthur Edsall. Edsall, who works for the Anglo-French Motor Co., was participating in a motoring exhibition at the Crystal Palace and driving a Roger-Benz car at 4 mph while ringing his bell. When he saw Bridget in the roadway, he shouted "Stand Back!" but she took fright and stood stock still in the path of his oncoming car. A witness testified that Edsall was speeding "as fast as a good horse could gallop," which was unlikely, since the car's top speed was 8 mph while a horse can gallop at 25-30 mph. However, Edsall had only been driving for three weeks and apparently had no instruction as to which side of the road he was to keep to. (To this day, the British--and many of their colonists--drive on the "wrong" side of the road.)³¹

- 1897 First US automobile insurance policy is issued by Travelers Insurance Company to Gilbert J. Loomis of Ohio, a bicycle shop owner who had begun designing autos. [This is according to the Ohio Historical Society, but disputed.]
- 1897-1924, FE and FO Stanley produce steam-powered cars, 1897-99, then sell the rights to this design to Locomobile. In 1902 they form their own Stanley Motor Carriage Co. producing steam-driven cars advertised as much safer than "Internal Explosion Engines." In 1906 one of their cars breaks the world speed record, doing one mile in 28.2 seconds, or 127 mph.³²
- 1897 Ransom Olds founds Oldsmobile, with assembly line production by 1903.
- 1897 Duck Roller Brake is patented by Abram W. Duck of Duck's Cyclery: level on handlebar connects to rubber rollers on each side of front tire.
- 1897 California Bureau of Highways becomes a Department, and ten years later is absorbed into the Dept of Engineering (1907).
- 1897 Isaac Rice acquires Electrobat cabs from Morris & Salom, then establishes the Electric Vehicle Company, with a fleet of electric taxis primarily in NY City until ~1906. Problem: batteries do not last long, so need charging stations across the city. See Wikipedia on Rice; Electrobat.
- 1898 First internal coaster brakes put on bicycle rear wheel; soon, rim brakes on both tires.
- 1898-99 Alexander Winton, automobile manufacturer of Cleveland, invents semi-truck rig to deliver new cars to distant customers: origin of the later "18-wheeler" truck.³³
- 1899 Automobile Club of America founded in Manhattan by "gentlemen auto racers"--a local club, despite the name.
- 1899 First auto to be seen in San Diego, in a circus parade.
- 1899 Thirty different US manufacturers now produce "horseless carriages."³⁴
- 1899 Joseph Jones of NY creates first auto speedometer (he drives a steam-powered car, which can go well over 40 mph), patents it in 1903.
- 1899 L. Marda composes perhaps the earliest music with an automobile theme, "The Studebaker March," a promotional piece.
- 1899 Jacob German, a NYC taxi driver, is the first person to be arrested for speeding.³⁵
- 1899 Henry Bliss, real estate dealer, is the first US pedestrian to be hit and killed by a car--run over by an electric taxi in NYC while getting off a streetcar. [In 2015, one pedestrian was killed in a vehicle crash every 1.6 hours, or 15 each day.]³⁶ Earlier pedestrians had been struck and killed by electric trolleys.
- 1900 Feb: D.C. Collier, attorney and real estate developer, is first San Diegan to own and drive an automobile; its top speed is 25mph and it can travel 50 miles on 3 quarts of gasoline. Shortly after, E.S. Babcock, president of Coronado Beach Company, buys an electric car, and Albert Spalding, local sporting goods magnate, a steam-powered Locomobile.³⁷
- 1900 Anne Rainsford French Bush of Washington, DC is first woman in US to get a driver's license (that is, a "Steam Engineer's License, Locomobile Class"). <FindaGrave.
- 1900 R. J. Morris composes music and lyrics for a very early automobile song, entitled "My Automobile Girl" (NY: Witmark), with this chorus: "In our Automobile / along the road we fly. / Nothing is too fast for us; / like a flash we pass them by. / There'll be a novel wedding / As through the town we whirl / How happy I'll be when she marries me / My Automobile Girl."
- 1900 Moving sidewalk is featured at Paris Exposition, with Edison Studios motion picture directed by James White showing pedestrians negotiating the marvel: https://www.youtube.com/watch?v=UTzqt50_4A
- 1900 William Phelps Eno publishes "Reform in Our Street Traffic Urgently Needed." Known during his lifetime (1858-1945) as the father of traffic safety, he is credited with inventing the stop sign and pedestrian crosswalk. He also popularized traffic circles and one-way streets. The rotary patterns around the Arc de Triomphe in Paris, 1907, and in Piccadilly Circus, London were created at his suggestion. Legend has it that

- his dedication to traffic reform arose from his childhood experience of a traffic jam in Manhattan in 1867 when he was 9. (Wikipedia)
- 1900 Dec: Ten Los Angeles businessmen form the Automobile Club of Southern California to advocate for better roads, to improve driving conditions, and to offer services (maps, signs, eventually emergency road assistance).
- 1900 Streetcleaners in NYC, which has ~100,000 horses on its roads, must shovel at least 2,500,000 pounds of horse manure each year, or ~500 tons each day.³⁸
- 1900 "Crossbuck" sign comes into wide use at railroad crossings: this is the x-shaped wooden sign with black letters on white background, still familiar.³⁹
- 1900 Claud H. Foster invents a multi-tone auto horn that he calls the "Gabriel," then founds Gabriel®, a company that in 1907 markets "the Snubber," an early version of the automobile shock absorber.⁴⁰
- 1901 Railroad man Henry E. Huntington and banker Isaias Hellman found the Pacific Electric Railway, which connects LA to many other Southland communities by electric trolley. During 1920s it is the most extensive trolley system in the world. [They hope to bring this system down the coast to Del Mar.](#)⁴¹
- 1901 National Good Roads Association takes shape.
- 1901 First posted speed limit: 1901, Connecticut, 12mph city roads, 15mph country roads.⁴²
- 1901 Frederick R Simms, British engineer, patents the first rubber automobile bumper.⁴³
- 1901-29 Charles H. Gillette of Hartford publishes the Automobile Blue Book, a road guide furnishing point-to-point directions inside and between towns, with details about nearby auto repair and maintenance shops. (Wikipedia).
- 1902 First external mechanical auto drum brake invented by Louis Renault.⁴⁴
- 1902 American Automobile Association founded, with local groups in California and NYC.
- 1902 Edgar P. Hooley of Derbyshire patents a variation of tarmac and trademarks the name. His tarmac calls for tar (modified with Portland cement, resin, and pitch) combined with waste slag (later, gravel aggregate), compacted by steamroller. Soon the tar in the formula is replaced by bitumen, a cheap by-product of petroleum production.
- 1902 First gasoline-driven motorhome, the *Passe Partout*, appears in France, superseding earlier steam-drawn trailers (since 1896) and motorhomes (since 1900). Wikipedia.
- 1903 Massachusetts and Missouri are first states to require driver's licenses; Massachusetts is first to issue state-made license plates, a nationwide practice by 1918.
- 1903 Dr. Horatio Nelson and Sewall K. Crocker, his hired mechanic, are the first men to drive across the US, with their bulldog Bud (the first cross-country dog), from SF to NYC, in 63 days, documented by Ken Burns in "Horatio's Drive" (2003).
- 1903 SD County supervisors pass ordinance requiring "any vehicle propelled by their own power must yield the right of way to every ox, horse, or mule." Speed limit set at 8 mph, though by this time Cadillacs and Stanley Steamers can go 40 mph.
- 1903 First comprehensive traffic code, designed by William Phelps Eno for New York City.
- 1903 First cinematic car chase in British film, "Runaway Match," in which an irate father pursues a couple eloping in an automobile.
- 1904 Federal Govt counts 2.15 million miles of rural public roads in U.S., but 93% are dirt. Of paved roads, 38,622 miles are stone or macadam, the rest are gravel, shell, or brick. "Good cobblestone" is not widespread; mostly in eastern cities.⁴⁵
- 1904 First US paper speeding ticket is given to Harry Myers, Dayton OH, for driving 12 mph.
- 1904 [First trip entirely by auto along coast from San Diego to Los Angeles](#) (actually, along the coast only to San Onofre, then inland and north).
- 1904 Dunlop and Continental Tire Companies put first treads on rubber tires.⁴⁶
- 1904 San Diego city directory lists 3 auto garages, 6 places that repair autos.
- 1905 AAA publishes its first maps.
- 1905 St Louis boasts of first dedicated gas "filling" station, proprietors Grenner & Laessig.⁴⁷
- 1905 Before Ford begins assembly-line production, US already has 78,000 motor vehicles.
- 1905 Lumière Brothers produce one of first films featuring an automobile accident, "Accident d'automobile," in which a car runs over a man, severing his legs.

- 1905 Frederick Simms patents first rubber car bumper, but later carmakers use steel strips.
- 1906 Ed Fletcher writes up his experiences of [An Auto Trip through San Diego's Back Country](#). He is the manager of the South Coast Land Company that in 1906 begins buying up much of the land of Leucadia and Del Mar. He will be one of the prime forces behind the construction of Hodges Dam. He will found Solana Beach (1922-24) and sell lots to Avocado Acres in Leucadia and land in downtown Encinitas.⁴⁸
- 1906 El Camino Real Association founded, begins erecting road signs along El Camino Real using the Mission Bell icon.
- 1906 First car to fly into outer space: in Walter R. Booth's motion picture, "The '?' Motorist," a silent comedy.
- 1907 [San Diego County bond issue finances construction of hundreds of new county roads](#).
- 1907 Inland Waterways Commission is created by Congress at request of Pres. Theodore Roosevelt to study transportation crisis caused by overloaded railroads (Wikipedia).
- 1908 Ford Model T, with pneumatic tires mfd by Harvey Firestone; top speed 45 mph.
- 1908 Firestone produces and advertises "non-skid" tire treads.
- 1908 Rhode Island is first to require a state driving test to get a driver's license.
- 1908 Toledo OH has 1st US semaphore road traffic signal, modeled upon RR signals: words "Stop" & "Go" in white on green background. Lights have red and green lenses lit by kerosene lamps for night travelers. Controlled by a traffic officer who blows whistle each time before changing the commands, to help alert travelers. Design adopted quickly by Philadelphia and Detroit.⁴⁹
- 1908 At urging of US Post Office RFD service, 900,000 mi of rural roads are improved.⁵⁰
- 1909 [Board of Supervisors of County of San Diego](#) creates a Highway Commission to aid in the construction of county roads, with a plan to create/improve 461 miles of roads in the backcountry. The Commission succeeds in building 445 miles of dirt roads, leading inadvertently to a serious dust problem for farmers and orchardists as a growing number of vehicles drive at speed through the backcountry.⁵¹
- 1909 Reighard's Gas Station, Altoona, PA, is converted from a blacksmith shop, opens under owner George Hinkle as first documented "filling station," still operating.⁵²
- 1909 [The McFarlands, man and wife, drive 8 hours from Pacific Beach to reach Los Angeles in their Maxwell Runabout](#).⁵³
- 1909 Notable automobile and horse traffic jam in LA, probably not the earliest there.⁵⁴
- 1909 International meeting in France agrees upon standardized signs for auto traffic
- 1909 Alice Huyler Ramsey (1886-1983, 22, becomes the first woman to drive across the US. She starts out from NYC in a 30-hp Maxwell, with sisters-in-law Nettie Powell and Margaret Atwood, and a 16-year-old friend, Hermine Jahns, as passengers. At one time reaching "the terrific speed of 42 miles per hour," at other times they must wait for waters to recede from overflowing creeks. They arrive in SF after 59 days.⁵⁵
- 1909 First application of the word "pothole" to a hole in the road: www.etymonline.com
- 1909-1911 [J. Frank Cullen lays out streets for, and develops, Cardiff-by-the-Sea](#).
- 1910 Estimated 1000 local cars on San Diego County roads.
- 1910 California State Highways Act, approved by voters (54% to 46%) after 1909 legislative act, authorizes \$18 million bond measure for constructing a statewide, interconnecting highway system, to be managed by State Dept of Engineering and to link all county seats. Initial work begins in 1912, as below.
- 1911 Tungsten incandescent street lighting is introduced; by 1917, 1,389,000 of these street lights illuminate the U.S.
- 1911 First road striping, Wayne County, MI, created by Edward Hines, supposedly inspired by a white trail from a leaking milk wagon to paint a centerline for 2-line traffic. See competing story for California-->1917 (& other claimants in Oregon).
- 1911 Construction begins on a Coast road between Carpinteria and the Ventura River.
- 1911-1914 First painted crosswalks appear in US: NYC, Portsmouth VA, Detroit area.⁵⁶
- 1912 California State Highway Commission formed, puts out construction contracts.

- 1912 US now has perhaps 200,000 mi of hard-surface roads, mostly urban.⁵⁷
- 1912 [Highway Commission announces intent to build highway from SD northern city limits near Del Mar, to LA](#); SD City Council considers improving the road from Old Town to meet that highway.
- 1912 [Automobile Club of Southern California publishes road map of SD, including Encinitas.](#)
- 1912 [Roscoe S. Porter describes the Highways and Byways of San Diego County, including the coast road from Del Mar up through Encinitas to Oceanside.](#)⁵⁸
- 1912 Charles Kettering introduces electric starter to Cadillac cars.
- 1912 Engineer Marion F. Oliver of Oakland CA patents pre-cured treads for tires, which helps with re-treading (and recycling) tires, according to Oliver Rubber website.
- 1912 Post Office Appropriation Act helps finance national road construction, especially for improving rural delivery (RFD).
- 1913 Gulf Refining Co., Pittsburgh, opens first drive-in service station in US. Unlike earlier (1907, 1909) curbside filling stations, this was specifically designed for autos and trucks, offering free air for tires.⁵⁹
- 1913 Stretch of Coast highway links Newport Beach and Laguna Beach in Orange County.
- 1913 or earlier, [Warner Rathyn opens Encinitas Garage on Coast Highway.](#)
- 1913 [Coast highway is paved through Cardiff, Encinitas and Leucadia \(see Leucadia 101\).](#)
- 1913 [J. Smeaton Chase, California Coast Trails: A Horseback Ride from Mexico to Oregon \(Boston: Houghton Mifflin, 1913\) pp. 43-44: Our route next day lay through a succession of depressing little boom towns, whose vacant stores and depopulated hotels bore witness to some of the more melancholy attributes of human character....Encinitas is the only one of several such settlements hereabouts that has survived the unhappy omens of its birth. New capital, wisely invested in roads instead of hotels, bids fair to put this pretty little town on a safe footing.](#)
- 1913 New Jersey institutes both written & road driving tests for driver's license.
- 1913 National Council for Industrial Safety forms; renamed National Safety Council, 1914.
- 1913 First automated railroad crossing signals, with flashing red lights: New Jersey.
- 1913 or so, Inventor John M. Murphy joins up with American Tower and Tank Co in Elgin IL to form the Elgin Sweeper Company, producing the first practical motorized street sweeper; in 1917 he patents a better sweeper with a conveyor belt.⁶⁰
- 1914 Wig-Wag signal, credited to Albert Hunt, mechanical engineer for Southern California's Pacific Electric interurban streetcar rr, installed at a Long Beach railroad crossing.⁶¹
- 1916 [Victor Albert Kremer \(1870-1957\) develops and names streets in Composer District of Cardiff-by-the-Sea. Born in Prussia, he has a medical degree when he emigrates in 1892 to Chicago, where he becomes a pharmacist and in 1897 a music publisher. By 1903 he had a silent film production company that made films starring Texas Guinan and opera singer Lina Cavalieri.](#)⁶²
- 1914 First electric traffic light, designed by James Hoge, with red & green lights and buzzer warning of light changes, installed in Cleveland, operated manually from a booth
- 1914 Florence Lawrence, auto enthusiast, invents first mechanical turn signal for autos, "Auto Signaling Arm," using electric buttons to raise a flag on rear fender to indicate turns. This was never patented, nor was her sign for a "full stop," activated at car's rear by pressing on footbrake. [=Florence Annie Bridgewood, Ontario, Canada, AKA in vaudeville "Baby Flo, the Child Wonder Whistler." She made 250 silent films from 1907-1913, mostly one-reelers, became known for her face as "the Biograph girl," then as lead actress for Carl Laemmle's IMP Co, first real "movie star," replaced by Mary Pickford, moves to Lubin Studios 1912, then forms own Victor Film Co w husband in 1912, sold to Laemmle's Universal Pictures in 1913].⁶³
- 1914 California begins issuing permanent license plates, made of porcelain, painted brick red with white lettering. In 1916 the plates became metal, with blue lettering on white background. These metal plates were issued annually until WWII, during which metal was a precious commodity, so the DMV began issuing short steel strips indicating each registration year, to affix to the vehicle's existing plate.⁶⁴

- 1914 Greyhound Bus Lines opens for business in 1914 in Hibbing, Minnesota.
- 1915 Automobile Club of St Louis introduces a First Aid Corps of five motorcyclists to provide roadside assistance, leading to AAA emergency service nationwide.⁶⁵
- 1915 Federal Bureau of Public Roads is created.
- 1915 California Vehicle Act creates the Department of Motor Vehicles, replacing Secretary of State as official registrar of bicycles, tricycles, autos, and horse carriages. In 1921 DMV was transferred to the Division of Motor Vehicles within the State Department of Finance; a decade later the DMS becomes a stand-alone department.⁶⁶
- 1915 First oil dipstick in a car.
- 1915 Boston Globe uses "U-Turn" as a noun; verb enters common parlance in 1930s. (OED)
- 1915-16? Coast Highway in Encinitas and Carlsbad paved.
- 1916 Federal Aid Road Act passes, first national funding in 20th century for improving roads.
- 1916-18 Ernest Holmes of Chattanooga invents first tow truck on frame of 1913 Cadillac.⁶⁷
- 1917 Florence Lawrence's mother [Charlotte Bridgwood->Lotta Lawrence] patents a system of electrical windshield wipers for autos.
- 1917 Dr. June Adaline Whittelsey Hill Robertson McCarroll (1867-1954, physician & Model T enthusiast) gets idea of putting white stripe down center of roads as safety measure. She paints the first one on Indio Blvd, then part of Highway 98, which leads Indio Women's Club to conduct letter-writing campaign to have California Highway Commission adopt striping, which it does seven years later, in 1924.⁶⁸
- 1917-18 Wisconsin is first state (in the world?) to number its highways.
- 1918 Leola King of Washington, DC, becomes first US female traffic cop.⁶⁹
- 1918 Malcolm Loughead invents internal hydraulic shoe brakes for autos.
- 1918 John Deere Co acquires Waterloo Gasoline Traction Engine Co, enters tractor business.
- 1919 US Army conducts First Transcontinental Motor Convoy, with 79 motorized vehicles of all sizes driven 3200 miles coast to coast. Lt Col Dwight D. Eisenhower participates and reports on the trip, praising California in particular for its paved roads.⁷⁰
- 1919 State of California approves the building of Route 56, which becomes Route 1, AKA the Carmel-San Simeon highway, running along the coast of Big Sur.
- 1919 Thirty-six states adopt a gasoline tax.
- 1919 County of San Diego Commissioners create another Highway Commission, headed by Ed Fletcher, "an advocate of better roads," with a budget of \$3 million for paving sections of highly-traveled roads throughout County. Commission manages to pave 80 miles of roads.⁷¹
- 1920 LA introduces first automated traffic light: red/green lights and bell, semaphore arms.
- 1920 Art and civic associations in Philadelphia meet to discuss the "Billboard Menace."⁷²
- 1921 Saint Paul, MN City Council approves a School Police Force of 750 boys as crossing guards, with first such crossing organized by Sister M. Carmelia Hanggi, Principal of Cathedral High School.⁷³
- 1922 "Hitch-hiker" first noted as a common word, in Minneapolis Morning Tribune (OED).
- 1922 Los Angeles introduces dedicated off-street auto parking (municipal parking lots).
- 1922 Houston TX installs first automated electric traffic light, working on a timer.
- 1923 Garrett Morgan patents three-color light system for traffic lights.
- 1923 General Motors chemists invent "no-knock" or leaded gasoline, first marketed in Dayton, OH. This increases octane but its fumes are later found to be dangerous; EPA begins phasing it out in 1970s, and it is finally banned in US in 1996.
- 1923 California Department of Public Works is reorganized; its Division of Highways now comes under the California Highway Commission.
- 1923 California passes legislation mandating its first state gasoline tax (2 cents per gallon), the resulting funds to be devoted to road maintenance.
- 1924 First auto-only tunnel in US: Liberty Tunnel, Pittsburgh, with innovative ventilation.
- 1925 Ford's Model T Roadster Pickup is the first successfully mass-produced truck.

- 1925 Milestone Mo-Tel Inn of San Luis Obispo built as the first motor hotel (motel) or auto court by Arthur Heineman and brother Alfred, who hope to create a chain of 18 motor courts at 150-200 mile intervals up the Pacific Coast. Their attempt to register Mo-Tel as a trademark fails, and so does their long-range plan. (Wikipedia)
- 1925 One-way streets, invented (some say) in Lima, Peru, begin appearing in Manhattan.
- 1926 Encinitas gets its first overhead streetlights, along main street (the Coast highway).
- 1926 Federal government develops the National Highway System, with unified numbering. US 101 is commissioned as one of the original Federal highways, stretching from California's Mexican border to Olympia, Washington.
- 1926 Route 66, the first paved road in the US to be experienced as a national cross-country highway, starts out in Chicago. By 1935 it arrives in Santa Monica. Bobby Troup will compose "(Get Your Kicks on) Route 66" in 1946, first recorded by the Nat King Cole Trio and immediately a hit.
- 1926-29 Leucadia Auto Court opens, now known as Leucadia Beach Inn.⁷⁴
- 1927 Hydraulic shock absorbers and electric starter are standard on Model A Ford, which has top speed of 65 mph.
- 1927 Insurance companies track more than 2 million traffic accidents involving property damage, 600,000 injuries, and 23,500 people killed in 1926, during which year 100,000 cars were stolen and 60,000 cars went up in flames. No wonder they sold US policies worth \$333 million, one-third of these for fire and theft.⁷⁵
- 1927 California increases its gas tax to 3 cents to fund new road construction.
- 1927-29 O. U. Miracle Company of Oceanside lays sidewalks in downtown Encinitas.⁷⁶
- 1927-29 First bumper stickers slapped on cars.⁷⁷
- 1928 First power-assist brakes using engine vacuum or hydraulic pressure introduced by Pierce-Arrow (earlier hydraulic brakes in Duesenberg in 1921).
- 1928 Gateway arch sign for ENCINITAS erected over Coast Highway at D Street.
- 1928-29 First cloverleaf interchange opens in Woodbridge Township, NJ, based upon designs in a 1916 patent by civil engineer Arthur Hale.
- 1929 First Airstream camper, built by Wally Byam on a Model T chassis->towable aluminum Clipper model.⁷⁸
- 1929 California Highway Patrol is created (earlier patrols, 1923, in Nevada and Utah).
- 1929 Duesenberg Model J luxury automobile can do 119 mph.
- 1929 San Diego Board of Public Works benefits from access to prisoners housed in Honor Camps, who labor to pave roads in the county.⁷⁹
- 1929 California League of Municipalities publishes an essay by Sol P. Elias, mayor of Modesto, on "The Regulation of Billboards." He writes, "Every rural billboard carries but one message. No matter what the design or the coloring or whether it refers ostensibly to chewing gum or to a favorite brand of cigarettes, the message is the same-'America, the Ugly.'"⁸⁰
- 1930s States begin to require rear brake lights on vehicles in U.S.
- 1930 NYC urban planner and lawyer Edward M. Bassett coins the word "freeway."
- 1930 First car radio, the high-end Motorola 5T71, from Galvin Mfg Co; Ford offers cheaper, factory-installed car radios in 1933.
- 1931 "Drunkometer" is developed by Rolla Neil Harger of Indiana U School of Medicine. In 1954/58, Robert F. Borkenstein patents a portable version called the "Breathalyzer."
- 1932 Congress passes the Revenue Act of 1932, including a federal 1 cent/gallon gasoline tax that consistently produces more revenue for federal highway maintenance and construction than all specific Congressional appropriations for federal highways over the next twenty years. [Susan Sage source]
- 1932 Ford produces first affordable car/trucks with V8 engines (already in earlier luxury cars such as 1905 Rolls Royce, 1915 Cadillac). Ford V-8s can reach speeds of 80 mph, prompting the cultural phenomenon of hot-rodding. Previously car racing had been the precinct of the wealthy, although racing crowds were diverse.

- 1933 Bayonne NJ police cars are the first to have 2-way radio dispatch system.
- 1933 Construction begins on the Golden Gate Bridge.
- 1933 Richard Hollingshead, Jr., opens the first drive-in movie theater, in Camden NJ. No drive-in theaters appear in San Diego County until 1947.
- 1933 Bruce Greenshields publishes his The Photographic Method of Studying Traffic Behavior, followed by his 1935 work, A Study of Traffic Capacity, in which he develops the ideas of "traffic density," "traffic flow," and "(mean) speed," establishing both the terms and methods for a new field of study that would be critical to the future design of safe roads, traffic safety and control measures.⁸¹
- 1934 When citizens of San Diego County vote to transform the position of County Surveyor into Road Commissioner, the said Commissioner, Ernest Childs, decides upon using asphalt instead of concrete for paving, since it is cheaper to lay down and easier to expand for more lanes. Meanwhile the State of California proposes a "pay-as-you-go" gasoline tax to provide funding for road construction, which will be a success.⁸²
- 1934 Peugeot offers first powered retractable hardtop convertible.
- 1935 First US parking meter, Park-O-Meter 1, is installed by the Dual Parking Meter Co in Oklahoma City, 15 July, but patents were filed as early as 1928.⁸³
- 1935 First permanent bridge is built over Batiquitos Lagoon, replaced sixty years later in 1995.
- 1935 Police Commander Harold Fowler, aloft over Manhattan in a Goodyear blimp, is likely the first to broadcast an aerial report on traffic, relaying it to radio station WINS-NY. Regular aerial coverage begins in 1937 on KNX-LA by Tom Hanlon.⁸⁴
- 1935 Log Cabin Auto Court opens in Leucadia.
- 1935 First Manual on Uniform Traffic Control Devices (includes road striping).
- 1935 California Vehicle Code, established in 1920s, is codified.
- 1935-1939 Works Progress Administration constructs and improves 620,000 of miles of roads, streets, highways, as well as 10,000+ bridges.
- 1937 Pacific Coast Highway is completed, running the length of California, although many sections retain local names.⁸⁵
- 1937 Coast Highway 101 is widened to 3 lanes in Encinitas to accommodate anticipated traffic at the opening of the Del Mar Racetrack and Fairgrounds.
- 1938 Arroyo-Seco Parkway built, first freeway in California (now part of Pasadena Fwy).
- 1938-40 First pedestrian Walk-Don't Walk lights are installed at intersections in NYC, Chicago, Washington DC.⁸⁶
- 1939 Buick makes electric turn signals standard in all of its cars. [See->1917.]
- 1939 Congress creates the Federal Public Roads Administration.
- 1939 California becomes first state to legalize a right turn on a red light. Reputed to save fuel, this change in traffic laws was promoted nationally by the Energy Policy and Conservation Act of 1975; by 1980 all 50 states would legalize the practice.
- 1940 US now has more than 27 million registered motor vehicles, 1 for every 5 people.
- 1940 Fifteen miles of a prospective Bessemer Super Highway are built in Alabama, modeled upon the German *autobahn*. This could have been the model for the US Interstate Highway System but it was never finished.⁸⁷
- 1940 Packard offers factory-installed air conditioning, luxury option but awkward and bulky, as was Cadillac option in 1941.
- 1940 Oldsmobile GM Hydra-Matic offers option of mass-produced fully automatic gear shift, i.e., automatic transmission.
- 1940 Pennsylvania Turnpike, 160 miles of concrete, is the first highway to have a median divider separating 2 lanes in each direction and limited access->prototype for the Interstate Highway System (see->1956)
- 1942-45 El Camino Real is significantly improved as the second (East) entrance to Camp Pendleton Marine Base.
- 1942 Willys-Overland manufactures US Army Jeep, based on "American Bantam" designs.

- 1942 March 5 US Navy Seabees forms under Latin motto, "*Construimos, Batuimus*" ("We Build, We Fight"), to construct roads, airfields, bridges, for the military. Unusually, the corps is composed of skilled construction workers and civil engineers, many beyond draft age.
- 1943 "Roadkill" slides onto a printed page in the *American Midland Naturalist* vol. 29 (OED).
- 1945 Curb ramps are first installed, on behalf of a disabled veteran, in Kalamazoo, MI. Many more will be installed after passage of Americans with Disabilities Act, 1990.
- 1947 First drive-thru restaurant, Red's Giant Hamburg. On Rte 66 in Springfield, Missouri.
- 1947 John L. Barker, Sr., and Ben Midlock of the Automatic Signal Company patent a radar (traffic) speed gun.⁸⁸
- 1948 Irene Rupe Swoboda (b.1909 Encinitas) becomes one of first female race car drivers.⁸⁹
- 1948 After eight years of campaigning by local citizens, the County installs traffic signals along the Coast Highway in Encinitas.
- 1949 Key ignition available for Chrysler cars.
- 1950 Introduction of mercury vapor street lighting, brighter and longer lasting; by 1964, 39% of all overhead traffic lights in US are mercury vapor.
- 1950 First yield sign, black on yellow, keystone-shaped (5-sided), Tulsa, OK, invented by police officer Clinton E. Riggs, soon after becomes fully triangular.
- 1950 Ford V8 Sedan has top speed of 88 mph. Muscle cars of 50s could exceed 100 mph.
- 1950s High tides flood Coast Highway 101 in Cardiff and rip up chunks of asphalt (more than once, and into the 2000s).
- 1951 Chrysler Imperial sports first mass-produced power steering system, rooted in an invention by Francis W. Davis (1920s).
- 1951 First "zebra" or pedestrian crossings with markings on road surface, Slough, UK.
- 1952 First rumble strips (audible lines, growlers) set into side of roads in New Jersey.
- 1952 Coast Highway 101 in Encinitas is widened to four lanes.
- 1953 First speed bump, or "traffic control bump," invented by physicist Arthur H. Compton while Chancellor of Washington University (St Louis) and disturbed by car speeds near his offices. Called a "sleeping policeman" in British and Caribbean English, the speed bump works in a fashion not unlike his Nobel-prizewinning description (thirty years earlier) of a quantum phenomenon (the Compton effect) wherein a high-frequency photon (or speeding car) interacts with a charged particle (or the bump), in so doing transferring some of its energy and momentum to the charged particle, emerging from the interaction with a lower energy signature (or slower car).
- 1953-54 AC/heat now factory-installed and dashboard-controlled by Chrysler and Nash.
- 1954-58 Factory-installed automatic turn signals become standard in US cars.
- 1955 Disabled parking spots established by Delaware law->widespread with passage of Federal Architectural Barriers Act of 1968 and Americans with Disabilities Act, 1990.
- 1956 Congress passes the National Interstate and Defense Highways Act, prompting the construction of 41,000 miles of an interstate highway system, funded by a dedicated Highway Trust Fund from fuel taxes. The Act authorizes \$25 billion, 1957-1969 to construct, refine, and number an Interstate Highway System.⁹⁰
- 1956-58 Gordon McLendon of radio station KLIF-Dallas is the first to broadcast live traffic reports from a helicopter, followed in 1957 by WOR-New York.⁹¹
- 1957 Jack Kerouac publishes his stream-of-consciousness semi-autobiographical Beat novel, On the Road = adventures of Sal Paradise (Kerouac) and Dean Moriarty (Neal Cassady) on a road trip across the US.
- 1958 Bonus Act is first federal legislation to control outdoor advertising, but only provides incentives to states to limit billboards within 660 feet of interstate highway system.
- 1959 First use of "crumple zones" in cars, standard by 1970s.
- 1960s: Driven by pioneering smog regulations in California, cars are fitted with Positive Crankcase Ventilation by 1961, standard on most US cars by 1964; Air Injection

- Reactors mandated for tailpipe emissions by 1966 → 1975 for catalytic converters.
- 1960s Inductive loops (magnetic sensors) are installed under roads to trigger traffic lights. Loops create an electromagnetic field that is interrupted by a vehicle's metal, signalling the traffic light controller. First designed by Charles Adler Jr., 1930s.⁹²
- 1962 First highway emergency call boxes (solar powered)--on Harbor Freeway, Los Angeles.
- 1965 After much campaigning by "Lady Bird" Johnson, the Highway Beautification Act is signed by Lyndon B. Johnson, limiting billboard size, spacing, and placement.
- [1965-66 Interstate 5 runs at last through Encinitas.](#)
- 1966 Federal Department of Transportation created by Congress, open for business in 1967.
- 1966 National Traffic Safety Agency (NTSA) established within Department of Commerce.
- 1966 Botts' dots become widespread. Invented circa 1955 by Elbert Dysart Botts, Caltrans engineer, to improve lane visibility, these raised round polyester dots placed along the stripes of a highly trafficked road would prove equally effective as tactile warning when cars inadvertently swerve into another lane. (Wikipedia)
- 1967 Federal Highway Administration is created inside the Department of Transportation, along with the National Highway Safety Bureau (NHSB).
- 1968 American Motors makes AC system standard equipment on their cars.
- 1968 Federal mandate: all cars must have seat belts: Title 49, US Code, Ch.301, Motor Safety Standard.
- 1970 National Highway Traffic Safety Administration created, succeeding the NHSB (1966)
- 1970s Sodium vapor lamps for street and highway lighting installed across U.S.
- 1972 Berkeley is first municipality to create citywide curb ramps at intersections,
- [1972 County of San Diego forms its own Department of Transportation, which manages all roads in Encinitas, still an unincorporated community within the County.](#)
- 1975 Catalytic converters become standard on US cars, mandated by 1970 Clean Air Act. Three-way converters appear in 1981.⁹³
- 1978-85 US states pass laws for child restraints/safety features in passenger vehicles.
- 1980: 25,000 Americans killed in alcohol-related crashes=50% of all traffic deaths. Candace Lightner organizes MADD, initially Mothers Against Drunk Drivers, then Mothers Against Drunk Driving.⁹⁴
- 1980 Sam Schwartz, chief traffic engineer for NYC Dept of Transportation, uses the word "gridlock" to describe the situation during a public transit strike (Wikimedia)
- 1981 In *Metromedia, Inc. v. City of San Diego*, 453 U.S. 490, the Supreme Court issues a complex opinion that extends limited First Amendment protections to billboards (and other forms of commercial speech) while confirming government's legitimate interest in regulating signage to promote traffic safety (by eliminating distractions) and to improve urban appearances and rural landscapes. This leads to more detailed legislation at every level, drawing a careful line between bans on billboards due to their physical presence (legal) and bans due to sign content (illegal).⁹⁵
- 1982: Howard-Barnes Alcohol Traffic Safety Law passes Congress, providing \$125 million in incentive grants for states to implement drunk-driving countermeasures.
- 1984 NY State leads with first state-level law re mandatory use of seat belts by drivers⁹⁶
- [1985 Proposed county ordinance banning all off-site signs in the "coastal zone--which includes the communities of Solana Beach, Cardiff, Encinitas and Leucadia."](#)⁹⁷
- 1986: MADD first uses term, "Designated Driver."⁹⁸
- [1986 Encinitas, now incorporated, assumes responsibility for its own road system.](#)
- [1986-87: La Costa Avenue is widened, speed limit raised, bike lanes created,](#)
- [1987 San Diego County decides to ban commercial billboards on Coast Highway from southern edge of Solana Beach up to Leucadia Boulevard, a result of 30+ years of campaigning by Wenetta Childs and the Solana Beach Women's Civic Club, who had earlier achieved the removal of non-conforming billboards in Solana Beach in 1971.](#)⁹⁹
- 1988 "Road rage" enters the dictionary.

1980s Undergirded by urethane wheels, Tracker Trucks (axles), sealed ball bearings, and stronger (laminated) boards, all invented/manufactured in Encinitas area in 1970s, street skateboarding takes off, using paved roads, curbs, parking structures.¹⁰⁰

1990 Supreme Court upholds sobriety checkpoints: Michigan vs. Sitz, 496 U.S. 444.

1990 Americans with Disabilities Act mandates national standards for accessible parking, as well as sidewalk curb ramps at intersections.

1990s Heal the Bay non-profit pushes for "No Dumping, Drains to Ocean" signage on curbside storm drains, first instituted in Los Angeles; design by Kevin McCarthy, art director and surfer, working for Chiat/Day.¹⁰¹

1995 A new, higher, sturdier La Bajada Bridge is completed, connecting Rancho Santa Fe with the City of Encinitas

1996 Cris Hicks originates and promotes Surfer sign for Encinitas, trademarks the sign.¹⁰²

1997-98 Leucadia Boulevard is extended east through what had been Ecker flowerfields to connect with El Camino Real.

1998 Coast Highway 101 is designated an Historical Roadway, meriting special signage.

2000 Gateway arch sign for ENCINITAS is restored over Coast Highway at D Street.

2002 California passes first child car-seat law, for children under 40 lbs.

2008 First Tesla Roadster, all-electric car (EV), appears on roads across the U.S.

2015 Nearly 15,000 US companies are in the billboard and outdoor advertising business.¹⁰³

2017 Updated California child car-seat law, mandating rear-facing seats for toddlers <2.

2017 California passes Senate Bill 1, Road Repair and Accountability Act, to address massive deferred road maintenance issues; the Bill increases the state gasoline excise tax by 12 cents per gallon.

2019 Coastal Rail Trail opens between Cardiff and downtown Encinitas.

2019-20 Encinitas installs its first traffic circles (roundabouts) at the Hymettus and Hermes Avenue intersections of Leucadia Boulevard, with another soon at Hygeia Avenue.

2020 Bicycle and pedestrian improvements under I-5 at Santa Fe Drive and at Encinitas Boulevard undercrossings.

2020 US Census shows a population of 258 million adults (18+), with 290 million registered motor vehicles. Given a driving age of 16, this would still mean at least one vehicle per eligible driver. With 4 million miles of public roads (paved and unpaved), for every mile of road in the US, there are 72.5 motor vehicles, not counting e-bikes. According to the Federal Highway Administration, Americans travel 3.2 trillion miles by car each year and truckers do 330 billion miles; adding in motorcycles, these statistics put some 900,000 motor vehicles on each mile of road annually. As for accidents, in 2020 there were 5.25 million police-reported motor vehicle crashes; the NHTSA estimates that 30% of crashes go unreported, so one can estimate nearly two crashes per year per mile of public road. About 7% of crashes nationwide result in fatalities, which yields a fatality for every 7 miles of public road, or an average fatal crash rate per mile of .14. In San Diego County, the highest fatal crash rate per mile (2009-2017) was .24, on the 11 miles of SR 163. By this metric, Highway 101, the Coast Highway, was safest, due in good measure to its lower speed limits.¹⁰⁴

2022-24 Caltrans and SANDAG North Coast Corridor project: construct new I-5 bridge over San Elijo Lagoon, with new pedestrian bridge beneath, and Class I and II bike paths, walking trails, redesign of Viewpoint on west side of I-5 before Manchester Ave exit, new traffic lights and Manchester Avenue striping.

2023-2026 Streetscape project in stages reconfigures Coast Highway from Cardiff through Leucadia with new pedestrian walks & bike lanes, diagonal and off-street parking, roundabouts, traffic lights, stop signs, landscaping, and subsurface drainage pipes.

2025: San Diego County maintains 2000 miles of roads. Encinitas maintains approximately 170 centerline miles of public roads.¹⁰⁵

2025: First woman to give birth in a driverless car (en route to the medical center at UC San Francisco).¹⁰⁶

2025 September The California Energy Commission announces that the state has 201,000 public and shared EV charging ports, the largest network in the U.S. The state has 68% more charging ports than nozzles at gas stations, not counting ~800,000 chargers in the garages of private single-family homes. These chargers serve 2.4 million EVs (zero emission vehicles) purchased since 2010.¹⁰⁷

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