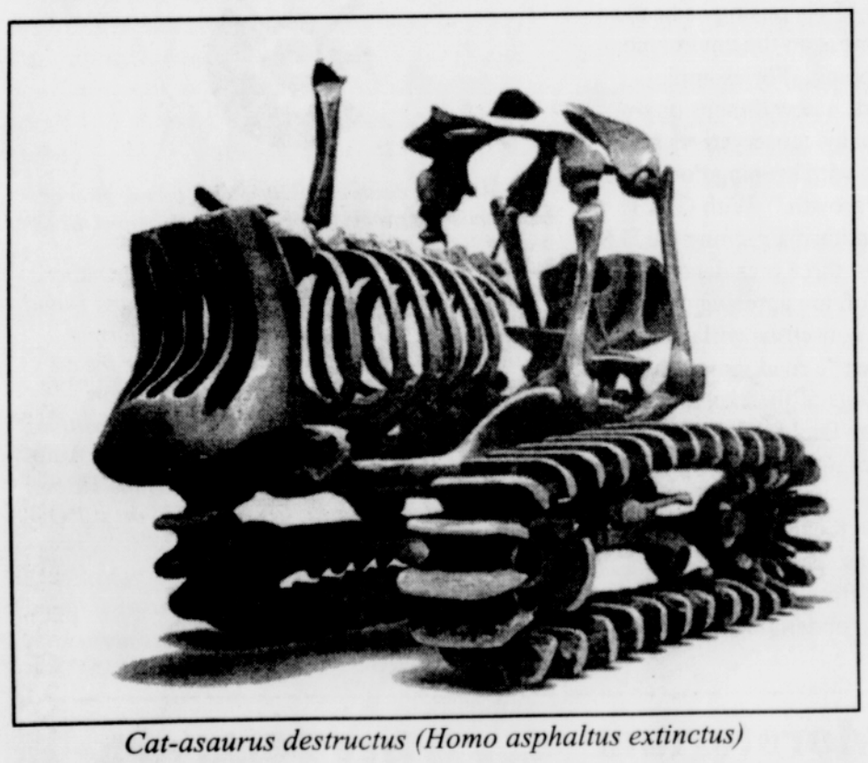
Pave Those Dirt Roads?

Some people want no dust or ruts when they drive. The slow speeds irritate some who are trying to "get some where," those trying to "live fast." Some sincerely wonder whether there is more erosion when dirt is exposed than if there is pavement. There seems to be less erosion with gravel roads, but there are still problems. But the decision on whether to pave existing unpaved roads is one that should take environmental, safety, and quality-of-life issues seriously. The economics of paving have to do also with who is being subsidized and who really pays for the paving and maintenance later on. In light of anticipated world-trade pressures to boost imports and exports, a vital question is whether we will have viable local economies or one, big, interdependent truck-driven distribution system which only profits unaccountable strangers far away. All these considerations take precedence over mere conveniences of no dust and more speed. And, a convenience today can actually be the cause later of much inconvenience.

Death on highways and neighborhood streets is a holocaust approaching 50,000 people per year in the U.S. If car, truck and bus fumes are included, the toll is perhaps 80,000. Road kills are responsible for perhaps a million animals (not including insects) dying each day on our nation's roads. The loss of life of people and animals cannot happen on a major scale if speeds are significantly slower. Survival rates are favorable in collisions at 20 miles per hour but much more lethal at 40 mph. The great speed of vehicles is unnatural to all species, even to humans. Judgment fails a deer or a person when a vehicle is tearing down the road at high speeds.

Only pavement makes such speed possible on the ground (excluding the issue of rail and trains). Speed fuels nothing more than the illusion of saving time, if, for example, commutes are lengthened, and less time is available with family and neighbors. There is a huge social cost to weakened community connections.

There are spiritual aspects to "sense of place" and with the perceived size of one's universe: with great speeds, people are able to easily cross a former wilderness, hurtling down a freeway in less time than it takes to "digest" some fast food from a highway-eatery franchise. Thus, the universe in effect shrinks more and more, and there is less and less individual and cultural connection to the land, trees, countless creatures, and the weather. The consequences are ecological destruction and ignorance of local peoples who are driven past.



Cat-asaurus destructus (Homo asphaltus extinctus)

Pavement is expensive to maintain. It degrades naturally and causes harm to vehicles and their occupants when it is out of repair. In the United States, low bids on road construction ensure that the pavement has to be resurfaced frequently. Almost $10 million are not being spent each year to fix existing paved roads in the U.S., while new roads, road widenings and "improvements" proceed apace via deficit spending. This will continue as long as our military establishment dwarfs the combined size of the next ten biggest nations' military budgets: the U.S. Interstate Highway System from its inception is part of the Defense Department network.

Pavement is a dead zone; there is no life possible on it. It increases local temperatures in the "urban heat island effect." Restoration of road beds is easier when starting with unpaved roads. Removal of roads, paved and unpaved, and of parking lots, has been identified as a source of forest improvement for salmon and for employing displaced timber workers. Additionally, farmland needs to be recovered from paved areas in urban and suburban communities, and the topsoil regenerated.

Pavement is usually in the form of asphalt, the dregs of crude oil refineries. An impermeable surface, pavement concentrates and directs runoff and erosion off the road. The more motor-vehicle traffic generated by "improving" or widening a road, the more water pollution emanates from the motor and lubrication drippings (plus antifreeze, brake and air conditioning fluids). Parking lots—even bigger sources of poison runoff—are a function more of paved than dirt roads. (It was a parking lot where Al Gore's son was almost killed by a car. Sadly, the lesson of pavement and cars was not to be had by the father, judging by his pro-vehicle ("clean" or otherwise) policies and lack of opposition to more highways.)

Air pollution is increased at the higher vehicle speeds that come with paving dirt or gravel roads. The California Air Resources Board recently found that 35 mph may be the optimum speed for internal combustion engines' mileage efficiency. Thus, highway and traffic engineers have been operating under a myth of the efficiency of speed. Air pollution is primarily a function of cars in the U.S., and autos in the U.S. are the single biggest greenhouse gas source globally . Six of the top seven air pollutants known to the U.S. Environmental Protection Agency come from the automobile. Soot, from diesel fuel and factories, kills over 50,000 people annually in the U.S. Tire dust is a major air pollutant. Most tires are simply refined oil residue. They are a hazard when a pile catches fire because it is almost impossible to extinguish. Empty tires catch water and breed mosquitoes.

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Asphalt is a toxic material that harms respiratory systems when hot and fresh, when it must be applied. Other toxics or corrosives or radioactive wastes are illegally disposed of through hiding them in asphalt or road oil (to keep dust down). Volatile organic compounds (VOCs) are just some of the long-term pollutants coming from any asphalt pavement. Asphalt "plants" (factories) are sited on roads for access, and there are usually people somewhere nearby who suffer from the dangerous and annoying fumes, as well as from the immense truck traffic.

High utilization of oil refineries' crude runs is desired to maximize gasoline and distillates. Selling by-products (such as asphalt, tires, plastics, and pesticides which include roadside sprays for defoliation) accommodates oil company profits which are mainly from gasoline. This is because unless asphalt, tires, plastics, etc., are disposed of, refiners' crude runs must be reduced sharply. What environmentalist would want to generate more asphalt, (the cheapest and most common pavement)? Most of the U.S. citizenry is "environmentalist," or so imagines, so there is an overdue awakening regarding asphalt, cars, and trucked corporate products—"green" and otherwise. Staving off global warming requires a halt in the spread of pavement.

Road building for large paved roads means using great quantities of gravel, usually taken from rivers. This has seriously degraded many rivers, so that road-building agencies must put major effort into negotiations with other agencies and local authorities, so the maximum rock can be taken for gravel. "Recycled" bottles and tires make up more and more of today's raw materials for U.S. asphalt demand.

If dust is a problem from vehicles passing by homes and restaurants on unpaved roads, people need to consider lessening the traffic instead of paving. Rail needs no pavement and makes no dust. Bicycles require only narrow pavement. The Alliance for a Paving Moratorium exempts bike- and footpaths from its proposal for a national moratorium on new roads and parking lots. (Mountain bikes require no pavement, although some thoughtless riders go on muddy trails, narrowly missing walkers, and cause erosion.) Walking, another wonderful from of exercise, kicks up little dust. A sedentary life (e.g., driving) kills tens of thousands of Americans per year prematurely and adds billions to health care costs.

Another medical as well as social-justice issue is how children, the aged or the infirm are able to cross a wide street. A small dirt road, or a two-lane paved road, is a different ball game than a four-laner or wider. Wide roads or paved roads have to do with conservation biology: animals are less apt to take a chance crossing either a wider road or one that is not of the local dirt as surface material. Wider roads are almost always paved ones.

It is still a matter of personal choice whether one paves his or her own yard and has a driveway, although this is becoming a matter of municipal interest because stormwater systems have been overloaded by too many paved surfaces including roof tops. Taxes addressing this have gone into effect. But the issue of paving a dirt or gravel road, even on private property, is not simply a personal decision; the public and the ecosystem are affected. For example, if a town paves a dirt road and a traveler passes through too fast for safety, the traveler's rights have been violated, because the required speed of the vehicle has been raised, stressing or even killing the driver and others.

There are permeable surfaces being experimented with, and these have the advantage of less runoff. But poison drippings from vehicles do then go into the ground, migrating into ground water. If it does not pollute way down deeply, the poison is too near the surface for farming if depaving later happens.

Crimes of violence and theft increase with more pavement, as undesirable out-of town characters in cars can prey upon local property owners, and escape handily. Some highways are long corridors of crime. On the other hand, tourists with dollars in pocket are likely to visit with their recreational vehicles. But are these low-fuel-efficiency and highly polluting vehicles desirable? Some of these drivers are senior citizens who due to diminished reflexes and narrowed peripheral vision are unsafe behind the wheel at any speed. Then again, senior citizens along with deaf people often have better driving safety records than young, alert teens, who speed for fun or out of despair over the state of the world in which they feel powerless.

Should roads be paved or widened mainly for the few who really benefit? Are those who are harmed by more pavement ever considered, or their arguments heard? Sometimes yes, but only if these folk all appear at each of the hearings on road projects which are often mere formality—in effect a sham. Is the corrupt influence on government agencies by paving contractors, home builders, shopping mall & business "park" developers, and vehicle interests always made clear? No. Do the mainstream media, with their advertising coming so heavily from motor vehicle manufactures and dealers, honestly or objectively deal with transportation and development issues? If they did, there would be no need for the plethora of alternative press devoted to different ways of traveling and living.

In "less developed" or "developing" countries, paving and widening roads brings on a host of social and economic problems threatening the survival of traditional societies. The environment is degraded and exploited mainly through roads, ironically often in the name of "sustainable development" or eradicating poverty. The same is true in the U.S., where the preponderance of dirt roads equates with poverty in the dominant mindset of so-called progress. The possible definitions of poverty, and exploring the virtues of subsistence living, require thought and experience beyond this particular paper.

Oil is a diminishing nonrenewable energy source. The U.S. is expected to run out of oil by approximately the year 2020, according to the Hubbert Curve on oil production (an industry and government forecasting standard). The rest of the world may be out of recoverable oil by the year 2040. More roads lengthen our domestic oil supply lines, promoting long-distance daily travel for essential needs or imagined needs, and discouraging local farming and gardening. Two-thirds of U.S. roads are paved. As oil is a strategic commodity which fuels wars, less dependence on oil is a prudent way to lessen geopolitical tensions and promote peace. This was the origin of the Alliance for a Paving Moratorium in 1990, when it was clear that energy conservation was taking a back seat to "war for oil" in national energy policy. Apart from the emerging New World Order of GATT to use up petroleum faster, nothing has changed since 1990 except that a road fighting movement exists finally. In fighting new roads, let us not allow dirt roads to become paved.

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