

Asphalt Nation

Reviewed by John Norris

There are 200 million cars in the United States. They are driven 2.5 trillion miles a year. They spew 60,000 pounds of carbon dioxide into the atmosphere every second. As powerful as statistics like these are, they reveal only part of the enormous cost of the car culture that has enveloped this country. While there are plenty of statistics in her recent book, *Asphalt Nation*, Judith Kay also tells the rest of the story. What Ms. Kay has done is provide a comprehensive overview of the dark side of the Faustian bargain our society has made with the automobile. She first looks at the environmental, social and economic costs of America's driving habits, then recounts the history of how we got where we are and finally offers suggestions for meaningful change.

We all know that cars are environmentally unfriendly, but it is eye-opening to read just how far-reaching the damage is. In addition to enormous quantities of carbon dioxide, expected to be the leading contributor to global warming in the coming decades, the combustion process produces another greenhouse gas, methane, and nitrogen oxides, which result in acid rain. And there are other problematic emissions. Carbon monoxide is potentially harmful to human health, and CFC's from automobile air conditioners will be the leading source of ozone layer depletion in the coming years. There are also particulate emissions. The effects of these pollutants is not merely future and theoretical. The very young and old and persons with breathing disorders suffer from car produced air pollution, cropland productivity is affected and various plant and animal species suffer from air pollution. This may be old hat to some of you. But did you know that more than thirty percent of the pollution associated with a particular automobile is generated before it is ever driven.

Of course, there are also the enormous consequences of car accidents: two million people injured and over forty thousand killed every year. And improvements in auto safety are offset by the increased number of miles driven. It's not just people who are at risk. Countless pets and wild animals die on roadways every year. While that may not be news to anyone who lives in Tennessee, which even has roadkill legislation, it

surprised me to learn that the automobile puts many endangered species at risk, including the American crocodile. Habitat fragmentation is but one of many other adverse environmental effects of a century of prolific road building. And suburban sprawl, with its attendant destruction of habitat, may be the single biggest threat to America=s wildlife.

Asphalt Nation excels in its assessment of the social costs of the car culture. Given her background as an architectural critic, it is not surprising that Ms. Kay focuses on the urban landscape, where the automobile has had a devastating impact. That is to be expected given that over fifty percent of the surface area of many cities is devoted to cars. In addition to the disruption of countless neighborhoods, road building has eroded the tax base of cities by not only encouraging the migration of businesses and the well-to-do to suburbs but also by placing otherwise taxable property in the public domain. Huge box stores, which are totally dependent on the automobile, and suburban shopping centers have reduced downtown and neighborhood shopping areas to a shadow of their former selves. And the list goes on.

While this country=s near-total dependence on the car has hurt all of us, it has had a disproportionate impact on the poor, the elderly and the infirm. For many working poor, owning and maintaining an automobile is a huge financial burden, exceeding even the cost of raising a child. And for those too poor to afford an automobile or precluded by disability from driving, living without one is often the central fact of their existence. In many locales, meeting such basic needs as buying groceries or getting to a doctor=s office is a major undertaking without a car. It follows that being carless severely restricts employment options for many.

The social effects of the car culture run deep. For the poor, it must be demoralizing to be constantly bombarded with the message that Ayou are what you drive.@ And for those who do drive, the isolation of the automobile has replaced the community of the trolley, the sidewalk and the front porch.

As to how we got where we are, Ms. Kay puts to rest the notion that the automobile achieved its ascendant position through market forces. In fact, through road construction, parking facilities and low gasoline prices, car usage has been subsidized

to an extraordinary extent. From the interstate highway system to a huge (and expensive) military presence in the Middle East, this nation's financial commitment to the automobile almost defies comprehension. This commitment has been to the exclusion of other modes of transportation. While trolley owners had to pay for tracks and right-of-ways, the automobile has long been the beneficiary of roads constructed with public funding. As to walking and biking, sidewalk construction has languished in the second half of the twentieth century, and the bicycle has not even been a blip on the country's transportation radar screen.

In spite of massive car subsidies, mass transit (which requires some walking) continued to be popular in this country as long as there was enough housing density to support it. But after World War II, the combination of an explosion of road construction and the availability of low interest loans to buy new houses in the suburbs led to an exodus to the suburbs and brought mass transit to its knees. The changes have been profound. The past fifty years have seen the construction of the interstate highway system, the birth of the megastore and the death of the downtown shopping district. Shopping malls have proliferated at an astonishing rate. Short-sighted zoning ordinances and misguided planning have promoted construction that segregates residences and stores, enhancing car dependence. As a result, any mode of transportation other than the automobile is considered alternative.

Interestingly, there have been voices of reason all along. But they have been drowned out by the highway crowd as most Americans subscribed to the notion that what is good for General Motors is good for the country. In recent years, however, the costs of the car culture have become so obscene that many communities are taking a hard look at other transportation options.

Ms. Kay does not offer any quick fixes for America's transportation woes. It will not be easy to reverse in a few years what has happened over decades. She does make an overwhelming case against electric cars. For one thing, any pollution reduction is likely to be minimal; the energy used to power an electric car has to come from somewhere, most likely burning coal. More importantly, the other costs of the private passenger automobile apply whether the vehicle is powered by gasoline or electricity.

Judith Kay's basic commitment is to mass transit. But for mass transit to work, it needs population density. People will simply not walk more than eight or ten minutes to get to a trolley or bus stop. Achieving density (and walkability) will require a return to mixed use developments that provide housing as well as convenient shopping and entertainment options. In some cities, attractive development has taken place along subway lines. With new zoning and planning approaches and convenient and affordable mass transit, the density needed to support the mass transit will come with time.

Perhaps the most radical suggestion Ms. Kay makes is that the automobile be required to pay its own way. Let gas prices reach a level that reflects its true cost, including the cost of air pollution. Take away free or below cost parking. Stop subsidizing suburban and exurban housing developments. The list goes on. Allocate transportation funds after careful analysis of the costs and benefits of individual projects and not simply to feed the road-building machine. Such analysis will suggest greatly increased funding for mass transit in most communities. It has, after all, become obvious that increasing highway capacity actually increases congestion by attracting more drivers. *Pave it and they will come.*

Where does this leave walking and biking? Clearly, the type of neighborhood that will support mass transit is going to be highly walkable. It will have sidewalks as well as shops and restaurants within walking distance. It will also have parking facilities for bicycles as well as bike lanes and routes. Such a neighborhood will be not only walkable and bikeable but highly livable.

Asphalt Nation should be required reading for those involved in transportation planning, and I would recommend it to anyone who is open to the possibility that there may be a better way of getting people where they need to go than the present system. Some may label the book one-sided. So what? Ever since we were old enough to watch television, listen to the radio or look at a magazine, we have seen and heard the supposed benefits of the car culture advertised ad nauseam. It is about time that someone examined the all too real costs of that culture. In *Asphalt Nation*, Judith Kay conducts that examination and convincingly argues that it is time for a change. If

enough people get the message, change will come and we will be better for it.