

Review: Transport Beyond Oil: Policy Choices for a Multimodal Future
Edited by John L. Renne and Billy Fields

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Renne, John L. and Fields, Billy (eds.). *Transport Beyond Oil: Policy Choices for a Multimodal Future*. Washington, Covelo & London: Island Press, 2013. 320 pp. ISBN: 9781610910439. \$40.00. Paperback. Recycled, acid-free paper. E-book also available.

Transport Beyond Oil is an interesting book on an important subject, showing how to simultaneously cure oil dependence and obesity, regenerate cities and mitigate climate change. Unfortunately, its repetitive character means that it is likely to preach only to those already convinced about the need for major changes in the current transportation systems for people and freight. In this sense, a concise monograph might have been more effective.

The starting point and initial motivation for this article collection is the Deepwater Horizon disaster. The editors ask us to imagine that 70 percent of the 68,000 square miles of oil that was floating in the Gulf of Mexico was destined to be consumed by America's transportation sector. Seventy percent is transportation's share of all oil consumed in the US. Oil spills are just one cost, however, and not even the biggest, of America's car dependence and addiction to oil. A commonly cited Environmental Protection Agency statistic states that approximately one third of all American greenhouse gas emissions come from the transportation sector. This estimate includes tailpipe emissions alone. If the emissions from refining and transporting the fuel are included, it increases transportation-related emissions to 43 percent of all emissions, making it the single largest slice of the entire emissions pie. Petroleum and motor-vehicle imports are also major contributors to the US trade deficit. In 2009, the oil imports and net imports of vehicles and vehicle-parts represented 87 percent of that year's \$381 billion trade deficit. One must add to this the military costs; Delucchi and Murphy, for example, estimate that 60 percent of Persian Gulf military costs are to maintain access to oil, representing about \$300 billion annually. Summing up, the total external costs of petroleum consumption in the U.S. might be as much as one trillion dollars annually.

Fortunately, this book does not stop at painting just the costs of this oil addiction, but also provides a recipe for a cure. This recipe includes an update of the freight transportation system (designed in the 1950s and largely completed by the 1970s), high-speed passenger rail systems, biofuels and plug-in electric vehicles. Its main component is, however, walkable and bike-friendly communities with good access to public transportation, preferably by rail. Kevin Mills' and Thomas Gotschi's calculations show that under a substantial mode-shift scenario, where 25 percent of trips would be made by bicycling or walking short distances, the economic benefits from fuels savings, reduced carbon dioxide emissions and health care savings related to increased physical activity could rise to \$66 billion annually. This shift would also help to reduce the federal budget deficit as investments in active transportation are highly cost-effective, returning more than \$4 to the Treasury for each dollar invested through savings in road construction and maintenance, health care and safety savings, and job creation. Such a change is very plausible; half of all trips taken in the United States today are within a 20-minute bicycle ride, and a quarter of overall trips are within a 20-minute walk, yet the vast majority of these short trips are taken by motor vehicles.

I would recommend this book to city planners striving to create affordable and family friendly communities, and politicians worried about the trade deficit and obesity crisis. Indeed, research shows that states and nations with high rates of public transport use coupled with biking and walking have the lowest obesity rates.

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