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Review of Clifford Winston and Chat Shirley, *Alternate Route: Toward Efficient Urban Transportation*

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Book Review


In the increasingly urbanized societies around the world, there is a growing recognition that the nature of urban transportation strongly affects the quality of life. Governments and transportation planners face many complex problems. These include resolution of the tradeoff between the individual and social optima in selecting travel modes; control of the negative impacts of excessive car use; and policies to increase use of transit, paratransit, bicycles, and pedestrian facilities. The federal transportation acts of 1991 and 1998 emphasize the importance of intermodal transportation systems and spell out policies to reduce car dependency.

In their book Alternate Route, Winston and Shirley claim that the present situation in urban transportation is a result of "entrenched and powerful political forces," by which they mean that governments virtually by definition do not pursue social goals. They claim that free market policies should replace government's role. The result would be a great reduction of investments in transit and an increase in use of cars—which they consider desirable. They claim that a theoretical model that they developed proves the validity of their policy suggestions. How a hypothetical "free market" would be compatible with social goals is not explained.

Among dust jacket blurbs, George Tolley of the University of Chicago goes so far as to claim that the authors "use the soundest and most up-to-date economic theories of transportation."

The question is, How can these economists propose "solutions" that are diametrically opposite to the developments, policies, and empirically based theoretical knowledge found in most cities around the world? How can anybody who analyzes urban transportation as a system find that support for transit is counterproductive, that use of private cars should be increased, and not even discuss such major components of the problem as parking policies, quality of transit services, pedestrians, and impacts of transportation on quality of life?

The explanation lies in the fact that Winston and Shirley repeat and magnify numerous fundamental errors—conceptual and methodological—in analyzing urban transportation, which were first presented by Meyer, Kain, and Wohl in the mid-1960s. These errors have been repeated by various authors every few years in spite of the fact that the trends in selecting urban transportation modes have run directly contrary to the "findings" of the Meyer-Kain-Wohl model that rail transit has virtually no place in urban transportation. Major deficiencies of these studies, of which The Alternate Route is only the latest, can be summarized as follows:

1. Transportation modes as different by their service as private car, bus, and rapid transit cannot be compared by costs only, as these authors have repeatedly done, because the demand for their travel is not at all the same (the classical "apples and oranges comparison" error). If motorcycles were included in such comparisons, the findings would be that they are the optimal mode of urban transportation!

2. Transportation modes are compared without considering their impacts in the physical world. Thus, Meyer et al. analyze transport of 30,000 persons per hour by cars without considering the fact that this volume would require some 250 acres of surface for parking in the center city! Nor could this volume be absorbed by any street network.

3. Most authors making comparisons of modes and, generally finding transit inferior, use a layman's definition of transportation modes. In addition to unrealistic assumptions about operations of different modes, Winston and Shirley simply discuss "bus" and "rail" as two distinct transit modes. The fact is that a bus operating on streets is as different from a regional rapid transit system as is a Cessna single-engine plane from a Jumbo jet. Comparing these two on the basis of cost and claiming that the cheaper one is superior obviously does not make sense.

4. Winston and Shirley continue the deep emotional bias against transit in general, and rail transit in particular, which has become a fashion among some theoreti-
cians. This bias is found in the overall treatment of modes, as well as in individual numbers. For example, load factor for cars is computed to be 0.37, i.e., much higher than quoted load factors for bus (0.09) or rail (0.21). However, the load factor for cars is computed as 1.5 persons per 4 seats, while real world value is about 1.1 persons per 5+ seats (most cars have 5, and many SUV’s 6-7 seats), which gives the value of only about 0.20, not 0.37.

Even more important, use of national averages for urban conditions makes no sense because they are very different from the values in urban areas, in major corridors, and during peak hours, where car efficiency is the lowest and transit efficiency the highest. Finally, the authors’ model for comparing modes draws on such references as a study by Keeler et al., from 1975, another computer-based analysis of a hypothetical city that produced highly unrealistic results.

The authors claim that buses would probably be cheaper than rail if used in the major corridors that rail typically serves. No person knowledgeable about transit would agree with this statement.

5. This bias led the authors to another conflict with the real world. Dozens of cities make major efforts to improve transit, particularly rail, due to its superior passenger attraction and positive impacts on cities. Winston and Shirley consider improvements of transit to be the main problem in cities, while they see increased use of cars as desirable. This can be plausible only if one analyzes a microview of short-term costs only, while disregarding all externalities; or, if the goal of urban transportation is minimum short-term public expenditure, rather than an efficient and livable city.

6. The social problems of total car dependence and the superiority of intermodal systems are not mentioned. The fact that totally car-dependent cities have no convenient transportation for some 25 percent of the population, and thus create a second-class citizenry, is not discussed. Nor is the fact mentioned that all cities that are economically efficient and environmentally sound, such as Boston, Munich, and Toronto, have extensive intermodal systems.

7. Finally, if one analyzes cities around the world, the most livable cities have distinctly diversified intermodal systems and wide applications of comprehensive planning, policies favoring transit, disincentives to car use in central cities, and careful design for pedestrians; in other words, they have been developed by the policies Winston and Shirley characterize as “unresponsive to social goals.” The “absence of governmental roles” that these authors promote is found in the congested cities of developing countries, such as Bangkok, Bogota, and to some extent, in most British cities.

How can the authors explain this discrepancy between their theoretical findings and real world cities, particularly those in Western Europe, Australia, and Canada? They simply ignore the developments and extensive policies that achieve balanced intermodal transportation with excellent results. The only mention of the experiences from our peer countries refers to Great Britain, and those are misrepresented. Privatization, which is often successful, is not distinguished from deregulation, which has actually brought great damage rather than claimed improvements to urban transportation in that country.

The authors are correct that pricing in urban transportation is inefficient and that it should be restructured. But while their focus is on reduction of funds for transit, they make only vague, unrealistic proposals about how to charge for car use. Paul Weyrich recently challenged his fellow conservatives to recognize that use of cars is actually grossly subsidized and further from a “free market” than transit.

The fundamental conceptual error of these authors is that they extrapolate the domain of the “free market” into territory in which economic theorists and practitioners have shown that it cannot be used: between systems with different investment/operating cost ratios, among systems that offer different types of services, and for services that have major social and economic impacts.

A book on urban transportation in this day and age that does not include in its extensive index such basic concepts as intermodal sys-
tems and urban livability, and which has only
criticism of what it simplistically refers to as
"rail transit." can hardly be considered an "up-
to-date economic theory." Rather, it represents
an obsolete, methodologically naive and ideo-
logically biased document.

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