Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities

By Jeffrey Tumlin

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Reviewed by Dan Piatkowski

Textbooks on the subject of sustainable transportation typically fall into one of two categories, the first focusing narrowly and with great detail on a specific aspect of the topic, the second attempting to provide an overview of the myriad issues that apply to both sustainability and transportation. In a classroom setting, the former are ideal for supplemental readings, while the latter—when properly executed—can provide a knowledge base and framework for a semester-long course. Jeffrey Tumlin's *Sustainable Transportation Planning* is a well-executed example of the latter. He has written a compact, engaging, and approachable text that is ideally suited to bringing a diverse group of students up to speed on the topic and providing a launching point for supplementary readings and discussions. I say this from experience, having assigned Tumlin's text to a graduate seminar I taught on the subject that drew students from planning, engineering, and public policy.

Sustainable Transportation Planning is designed for practitioners, policymakers, citizen-activists, and students rather than serious researchers, as Tumlin points out on the first page. To his credit, Tumlin successfully addresses the needs of this broadly defined audience. The greatest strength of the book, and particularly its early chapters, is the references we are directed to for further study. The book begins by making the case for transportation as a means of reaching sustainability goals, not as an end unto itself; sustainable transportation is "an investment tool that cities use to help achieve their larger goals" which he identifies as: economic development, quality of life, social equity, public health, and ecological sustainability. His discussion of the "Three E's" of sustainability (Environment, Equity, and Economy) is simple and direct, introducing readers to such diverse concepts as life-cycle analysis, Maslow's hierarchy of needs, and market failures in funding transportation.

Chapters 1 through 4 first provide an overview of sustainability and an introduction to transportation's impacts on public health, and then brings our attention to what Tumlin posits as one of the greatest obstacles to

creating sustainable cities: "the absence of a commonly held, compelling vision of the city of the future." Tumlin draws from a number of scholarly sources and well-known books (such as Gehl's *Cities for People* and Vanderbilt's *Traffic*, to name a few) to present a comprehensive overview of transportation, the built environment, and health. Tumlin closes his first chapter by placing transportation planning goals in the context of mobility and accessibility. He is able to clearly define and articulate these sometimes challenging concepts in only a few hundred words. His economy and careful choice of topics and examples serve the book well.

The bulk of the text (Chapters 5-13) is topical in nature and chapter subjects range from bicycling, walking, transit, and motor vehicles, to parking, car sharing, transit station areas, and transportation demand management (TDM). In general, the chapters on each mode begin by discussing that mode's role in transportation sustainability and then proceed to best practices in street design and level-of-service measures. The street design elements are a useful distillation of existing best practices, and a necessary component to any textbook on the subject, but my students and I tended to skim past them to the effectively made "significance" arguments: the whys and hows of a specific mode's role in the larger context of transportation sustainability.

The chapters on parking, car sharing, transit stations, and TDM are prime examples of Tumlin's success in creating what he describes as "a transitional document," synthesizing applicable knowledge from a variety of fields (frequently, but not only, engineering and health) to offer "implementation-focused guidance" on reduced auto-dependence and increased sustainability. Rather than seeking depth in his treatment of topics, we are directed to empirical research (like that of Susan Shaheen, Adam Cohen, and others on car sharing) or seminal texts (such as Donald Shoup's *The High Cost of Free Parking* and Anthony Downs' two works *Stuck in Traffic* and *Still Stuck in Traffic*).

I would have liked to see more about the connection between transportation and land use in the book. The chapters on walking, cycling, and transit make only brief mention of the role of land use in supporting or discouraging these modes. Neglecting an explicit focus on connecting mobility, accessibility, and land use to non-auto travel is a missed opportunity and an important aspect of sustainable transportation planning. It is difficult to imagine a reader who would choose to read a list of design guidelines over a concise distillation of the factors that influence mode choice decisions, and that may be the most important omission in the text. I did not use this book as a stand alone text, and Tumlin does not claim it as such.

Sustainable Transportation Planning closes with a concise chapter on "Measuring Success," an enormously important topic in planning, but

especially in transportation. Tumlin's treatment of the subject is practical and direct, perhaps reflecting his own experience as a transportation planner. As with the rest of the book, this chapter's strength is its breadth rather than depth, and rather than concluding the text with a sweeping chapter on future directions, Tumlin keeps things succinct and applied (the actual final chapter is a list of useful resources). For someone new to sustainable transportation, this book provides an ideal overview of key issues, a helpful quick reference on design guidelines, and, perhaps most importantly, a long reading list for those interested in digging further into the subject. As a teaching tool, I found the text ideal as an engaging and accessible launching point for the supplemental readings I selected, and a rich source of material for classroom discussions.

It also speaks volumes that after a semester with this textbook, my students thanked me for selecting it for the class.

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